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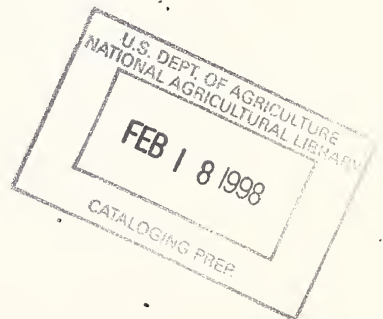
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LARGE-SCALE FARMING IN THE UNITED STATES

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By D. Curtis Mumford,  
Formerly Associate Agricultural Economist.

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Washington, D. C.  
April 1933

1837

## FOREWORD

When this study of large-scale farming was first undertaken it was planned to make a general survey of the situation at an early date and to follow this with studies of specific phases of the problem as they became of evident importance. But, because of interruptions and delays, necessitated by work on emergency programs, the first phase of the project which was tentatively summarized in 1933 has been but recently put into shape for distribution.

It would appear that the recent concentration of ownership in farm lands has not resulted in any appreciable increase of large-scale farming. Because of the continuing dearth of published material on this subject the results of this study are being made available in a limited mimeographed edition as reference material for workers in the field. Needless to say, the full objectives of the project have not been realized and cannot be reported upon until such time as conditions permit a further study of the problem.



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By D. Curtis Mumford, formerly Associate Agricultural Economist,  
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### INTRODUCTION

At various times in the past there has been, and at various times in the future, there undoubtedly will be, considerable interest in large-scale farming in this and other countries. Such a period of interest, although not the first in the United States, covers a period of several years prior to and immediately following the year 1929.

There were numerous popular and scientific discussions of the advantages and disadvantages of large-scale farming, 1/ and additional large-scale farming ventures were formed. Casual observers as well as recognized authorities in agricultural economics took sides in the discussions, debates, and formal treatises on this controversial subject.

At least three factors were responsible for this active interest in large-scale farming. First, in some sections banks, insurance companies, private individuals, and holding companies owned large tracts of land because of mortgage foreclosures. This land could frequently be bought at prices far more reasonable than had prevailed for many years previous. In some instances the organizations in possession of large tracts took steps to operate their holdings along large-scale farming lines. In other instances, because of the seemingly cheap land situation, private concerns in some sections formed large-scale farming organizations some of which were incorporated.

A second reason for the widespread interest was the marked progress made by manufacturers of farm machinery in developing a line of agricultural machinery that lent itself readily to large-scale operations, often requiring a high degree of technical training to operate and maintain.

A third factor of importance was the price of agricultural products. Relatively attractive farm commodity prices coupled with relatively low costs of production growing out of newly developed technical methods of production had much to do with the unusual interest in large-scale farming.

Unfortunately during this time of widespread interest no adequate supply of facts regarding large-scale farms in this country was available. Had such data been available probably more fact and less fancy would have been interjected into the controversy. Recognizing this scarcity of information the Bureau of Agricultural Economics formulated a research project in 1929 designed to secure facts pertaining to the extent, general characteristics, and some of the significant aspects of large-scale farming. Historical and sociological aspects of large-scale farming were not included. But those aspects are recognized as important, and the results of studies of those phases should temper the economic conclusions to a certain degree.

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1/ See Agricultural Economic Bibliography No. 69, "Large Scale and Corporation Farming," Bureau of Agricultural Economics, United States Department of Agriculture, April 1937.



## LARGE-SCALE FARMING DEFINED

There has been considerable confusion, and naturally so, as to what constitutes a large-scale farm. Any number of terms, for example, industrialized farming, chain farming, group management, supervised farming, corporation farming, and still others have been used interchangeably in this connection and have been considered frequently, especially by the reading public, as belonging to the same general system of agricultural operation. Strictly speaking, some of these terms have little or nothing in common save that usually, but not always, a large number of acres is involved.

It appears, therefore, that the term, large-scale farming must involve a rather all-inclusive concept, especially if it is to be applied under varying conditions to distinctly different types of farming throughout the United States. For the purposes of this study, a large-scale farming organization was defined as follows: A single farm or a group of farms under one closely controlled and supervised management, if the size of its total farm business was at least five to eight times as large as the typical farm business in the same locality producing the same kinds of products. To measure the size of business properly some sort of index is needed. The following scheme was used in this study and was found reasonably satisfactory in determining the size of a particular farm business almost regardless of the section of the country or the type of farming. It might be called a "combination-size index." Its essential feature lies in the possibility of combining into one figure an index of size constructed by an arbitrary and approximately equal weighting of three significant measures of size of business; namely, acres, men, and capital. The "acre" figure in table 1 represents the total number of acres under the direct or close supervision of the owner or manager. The "number of men" refers to the average number of men employed on the farm during the year and includes operators, managers, and supervisors as well as share or wage hands. The "capital" figure refers to the total amount of capital invested in the entire farm business including land.

Table 1. - Group values for designated acreage operated, men employed, and capital invested per farm for the farms studied, 1930 <sup>1/</sup>

Group: value:	Acreage operated per farm	Group: value:	Men employed per farm	Group: value:	Capital invested per farm
:	Acres	:	Number	:	Dollars
0	: Under 100	:: 0	: Under 2	:: 0	: Under 10,000
1	: 100 to 174	:: 1	: 2 to 4.9	:: 1	: 10,000 to 24,999
2	: 175 to 499	:: 2	: 5 to 9.9	:: 2	: 25,000 to 49,999
3	: 500 to 999	:: 3	: 10 to 14.9	:: 3	: 50,000 to 99,999
4	: 1,000 to 2,499	:: 4	: 15 to 19.9	:: 4	: 100,000 to 249,999
5	: 2,500 to 4,999	:: 5	: 20 to 24.9	:: 5	: 250,000 to 499,999
6	: 5,000 to 9,999	:: 6	: 25 to 49.9	:: 6	: 500,000 to 749,999
7	: 10,000 to 24,999	:: 7	: 50 to 74.9	:: 7	: 750,000 to 999,999
8	: 25,000 to 49,999	:: 8	: 75 to 99.9	:: 8	: 1,000,000 to 2,499,999
9	: 50,000 and over	:: 9	: 100 and over	:: 9	: 2,500,000 and over

<sup>1/</sup> Code used for obtaining combination-size index.

The combination-size index may be calculated as follows: Suppose we take a midwestern diversified farm consisting of 160 acres, employing a total of 2.5 men on the average for the year, and having a total capital investment



of \$20,000. The respective group values according to table 1 are 1, 1, and 1. Adding the individual digits we obtain the sum of 3 which is the combination-size index. It is not to be expected that an index of "1" for acres will be associated always with indexes of "1" for men and "1" for capital. In fact it is this very feature which enables the combination index to be used for different types of farming. For example, in a ranching country, one might obtain a series of values such as 6, 1, and 3, giving a combination index of 10.

Depending upon the section of the country and upon the type of farming in question, a certain value of the combination index was selected above which value all farms were called "Large-Scale" and below which all farms were called either "Small" or "Medium." It should be clearly recognized that there is, of course, no hard and fast line of demarkation between a small or medium-sized farm and a large-scale farm. They shade into each other by imperceptible degrees. The important thing to watch in selecting the large-scale farms is to see that the farms selected as being "large-scale" are not just "overgrown" family-sized farms but are clearly over the border line and representative of a distinctly larger type of farm organization. It was found that ordinarily a classification about as follows gave fairly satisfactory results:

Small = A combination index of 0 to 4, inclusive.

Medium = A combination index of 5 to 9, inclusive.

Large-scale = A combination index of 10 and over.

In dealing with specialized types of agriculture such as, for example, wheat farming, the number of acres in wheat is perhaps one of the best single measures of the size of business; in a specialized dairy region, the number of cows in milk; in a specialized cotton country, the acres in cotton, and so on. But even here in many instances a combination index is perhaps the safest guide in determining what shall be included in "large-scale" and what shall not. In this study such factors as were just mentioned, namely, acres in wheat, number of dairy cows, acres in cotton, etc., were used in several instances to help refine the combination index method of size determination. 2/

It may be well to clear up a certain amount of confusion with reference to the differences in meaning between chain farming, group farming, group management, corporation farming, and so on, - terms that have already been mentioned. This may be done probably to best advantage by drawing up a chart such as the one following and discussing its contents.

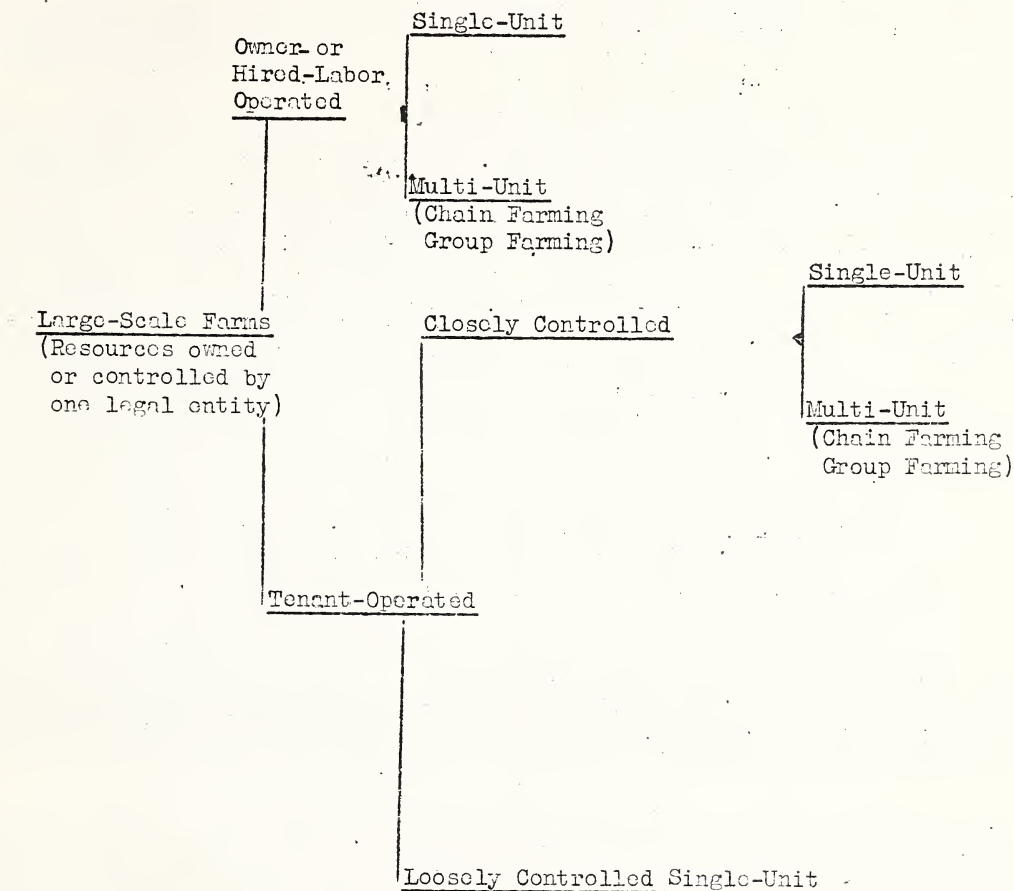
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2/ Mention should be made of an important study by R. D. Jennings, entitled, "Large-Scale Farming in the United States, 1929" issued in 1933 as a special monograph of the Bureau of the Census, in connection with the 1930 Census of Agriculture. In this monograph several measures of size of business are tabulated and discussed. With certain exceptions, however, the yardstick that was finally used in the census monograph to establish the minimum size of a large-scale farm was the qualification that such a farm must have had in 1929 a "Value of Products" of \$30,000 or more.





Large-scale farms classified according to type of organization  
and operation



As indicated in the preceding chart, large-scale farms may be divided into two main subgroups, namely, Owner- or Hired-Labor-Operated Farms, and Tenant-Operated Farms. Under the former group fall all large-scale farms that are operated on the wage basis. This group may be divided again into Single-Unit farms and Multi-Unit farms. A single-unit farm is composed of one compact body of land, usually possessing but one headquarters. A multi-unit farm is composed of several tracts of land or separate farming units or even several individual farms - each multi-unit farm possessing more than one headquarters. The ownership or control of resources on single units and multi-unit hired-labor-operated farms is ordinarily vested in one legal entity such as an individual, a partnership, a corporation, a trust, or an estate. The term "Chain Farming" may be applied correctly to the operation of a single ownership multi-unit farm and may be defined as a group of farms either in one or several localities, the resources owned or controlled by one legal entity which exercises a virtually direct and complete authority and control over the operations on each farm through an overhead management service usually set up by the parent organization itself. It is possible also to speak of such





an organization as an example of Group Farming; although as will be pointed out later, there is a significant difference between a certain type of group farming and chain farming.

Taking up now the other main group of large-scale farms, namely, Tenant-Operated farms, we discover that not all such can be included under large-scale farming enterprises. In the main it is correct to include only the "Closely Controlled" tenant-operated farms under the term large-scale farming. A tenant farm may be said to be "closely controlled" when the owner or central management exercises a large amount of supervision and control over the tenant. Ordinarily this involves a control over the conditions under which purchases and sales of livestock, seed, crops, fertilizer, and supplies are effected, a specification of the crops to be grown, and the determination of what rations are to be fed to livestock. Under this system the landlord or central ownership usually owns all or a share of the livestock. There are, of course, all gradations of management supervision to be found, and considerable judgment must be exercised in deciding where to draw the line between "closely controlled" and "loosely controlled" tenant-operated farms because there is no definite line of distinction between these two types of management. A loosely controlled tenant farm is one in which most of the decisions are left to the discretion of the tenant. Thus the Loosely Controlled tenant-operated farms are excluded from a large-scale farming classification with this exception, that if a single-unit loosely controlled tenant-operated farm is large enough in and of itself it may be classed as a large-scale farm. The closely controlled tenant farms may be classified again into Single-Unit farms and Multi-Unit farms. The latter, namely a multi-unit closely controlled tenant-operated large-scale farm is another good example of a chain farming proposition. It may also be cited as an example of group farming.

The distinction between chain farming and group farming may be explained as follows: The term "group farming" may be applied to a group of farms either in one or several localities owned by one or more legal entities and operated by either its own management organization or by a farm management service which may have complete or only partial authority and control over the operations on each farm. Hence it appears from our definitions that all chain farming organizations may be considered as examples of group farming but that only certain phases of group farming may be called chain farming. To be the latter there must be one ownership or control of resources, and complete supervision and control. It might also be mentioned that practically all chain farming organizations can be considered as examples of large-scale farming whereas only such group farming propositions as can exhibit sufficient size, complete control, and one ownership or control of resources can be considered as examples of large-scale farming. Not all large landholders practice large-scale farming.

Corporation farming is frequently thought of as being almost synonymous with large-scale farming. This, of course, is very far from the truth as there are a great many incorporated farms which are small in every sense of the term. Also, there are perhaps more large-scale farms which are not incorporated than there are those which are. A discussion of this point will appear later.

Cooperative farming is a term usually applied to a situation in which two or more individual farmers cooperate with each other in the use of machinery, pure bred sires, exchange work, and so on, or employ a farm management specialist to act in an advisory capacity to each farmer in the group.



None of these examples of cooperative farming can be referred to as large-scale farming unless the operations are of sufficient size and unless there is a single directing authority such as a manager or a board of directors who definitely directs the farming operations of the entire group as an integral farming unit. An example of this would be an incorporated cooperative farming organization.

Management farming, often spoken of also as group management, is a phase of group farming. Three examples may be given:

1. A landlord or his agent exercising only partial or loose control over several tenant farms.
2. A group of farms belonging to more than one owner under the supervision of a commercial farm management service.
3. A group of farms belonging to more than one owner under the advisory supervision of a farm manager employed by the cooperating farmers who pay his entire salary or a portion of his salary, the remainder being paid by the State Agricultural College or some other public agency. This is also a phase of cooperative farming mentioned previously.

Management farming should not be confused with large-scale farming.

The acid test then, so to speak, of a large-scale farm is, first, - a large farm business, determined either by the "combination-size index" or by some other rule; second, - a close or tight control and supervision over the entire property; and third, - an ownership or control of resources by a single legal entity.

Large-scale farms, in addition to being classified into owner-or hired-labor-operated and tenant-operated farms, may be further classified as to the financial objective of operation and as to the anticipated period of ownership. There are some large-scale farms that are operated largely for pleasure or for "show." The problems involved in such operations are radically different from the problems arising on large-scale farms operated for profit. For this reason such farms have been excluded from certain of the tabulations in this report. With regard to the period of ownership, there are many farms which are being managed on a "liquidation" basis. Ordinarily, foreclosed farms and other distressed land in the hands of banks and insurance companies are handled on a liquidation basis, which generally carries with it a policy of putting as little money into improvements as possible and almost always the policy is to sell as soon as a satisfactory sale can be made. In this study an effort was made to secure information on this point. Obviously, the management in these cases is confronted with an entirely different set of problems from those faced by the management under conditions of a more permanent ownership. There are some instances, of course, where the condition of the property at the time of acquisition is so poor that it is essential to hold the property long enough to build it up before attempting to place it on the market.

The foregoing remarks upon the classification of large-scale farms and upon the differentiation in the meaning between several rather commonly used terms have been made in the belief that a study of large-scale farming, to be of the greatest usefulness, should take them into account.



In analyzing large farming organizations of the chain or multi-unit variety it may be found that, along with other fairly well recognized factors, a considerable portion of the success or failure of these organizations may have been due to the amount or degree of management delegation which the owner or central management has seen fit to grant to the individual units in the chain. More will be said about this point later.

### HOW DATA WERE OBTAINED

In the fall of 1929 a preliminary questionnaire survey was conducted for the purpose of obtaining the names and addresses of owners or managers of large-scale farms in the United States. 3/

From the results of this questionnaire and from other miscellaneous sources a mailing list of approximately 22,000 names was secured. To each of these a Large-Scale Farming Questionnaire was sent. 4/ It was recognized that all of these farms were not "large-scale" in any strict sense of the term. It was deemed wise, however, to circularize the entire list in order that no large-scale farm might be left out. An additional advantage of this policy was the procurement of a sizable sample of small and medium-sized farms belonging to the same types of farming and located in the same areas. These were especially valuable in this study for comparative purposes.

To those individuals who were tardy in replying to the large-scale farming questionnaire, a second and later on a third request was mailed. These schedules were mailed out and the replies were received during the late spring, summer, and fall months of 1930. A total of 5,217 schedules was thus obtained from the list of 21,922 farmers circularized. This represented a return of about 24 percent. When the final editing was completed there remained 3,581 usable records. According to methods previously described these records were divided into three groups as follows: 1,116 large-scale farms, 1,846 medium farms, and 619 small farms.

### LOCATION OF LARGE-SCALE FARMS

#### In General

Contrary to the general belief at the time, there was in 1930 a surprisingly wide distribution of large-scale farms over the United States. This is indicated by the Census Monograph already referred to and is also borne out by the results of the present study as shown by the data in figure 1. One of the surprising things brought out by this chart is the relatively large number of large-scale farms in the sample studied which appeared in the eastern part of the United States and throughout the South. Another surprising feature

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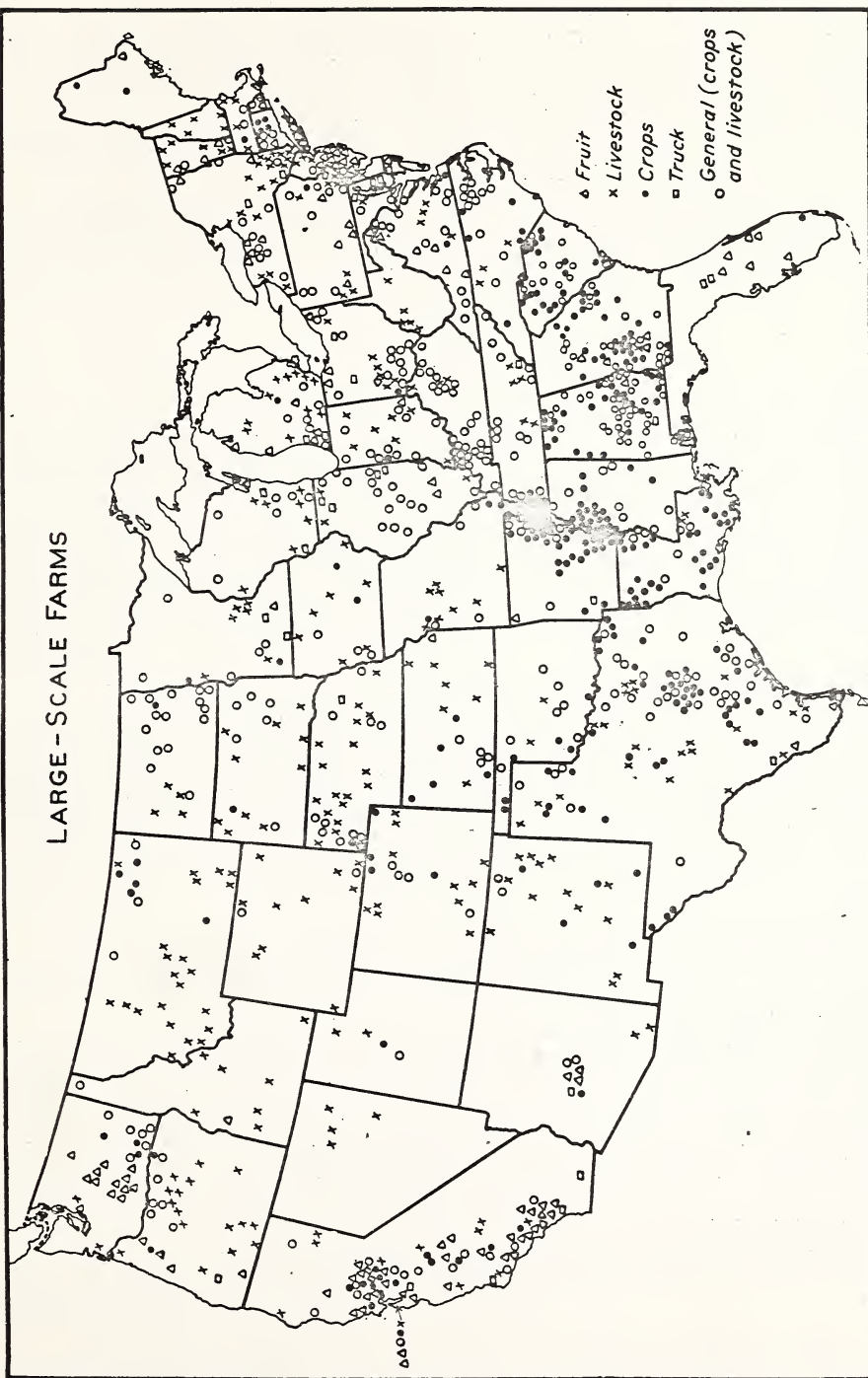
3/ These questionnaire schedules were sent to approximately 33,400 crop reporters of the Bureau of Agricultural Economics and to 1,100 "key bankers" in the United States. The schedule requested the recipient to fill in the names and addresses of any and all large-scale farmers in his neighborhood, together with information as to the approximate acreage in each farm and the principal sources of income. A 35 percent response was obtained from the crop reporters and a 51 percent response from the bankers. Together they reported 21,305 farms which they considered to be "large-scale."

4/ A copy of this schedule appears on pages 50, 51, and 52.





# LARGE-SCALE FARMS



U.S. DEPARTMENT OF AGRICULTURE

BUREAU OF AGRICULTURAL ECONOMICS

FIGURE 1.- A RELATIVELY LARGE NUMBER OF THE LARGE-SCALE FARMS STUDIED IN 1930 WERE LOCATED IN THE EASTERN AND SOUTHERN PARTS OF THE UNITED STATES.





9.

in the distribution of large-scale farms over the United States, as evidenced by this study, was the lack of any special concentration of such farms throughout the Great Plains States, - States in which it had been supposed that a preponderance of large-scale farms would be found. The Pacific Coast States, and especially California, show up well with a goodly number of large farms.

The number of large-scale farms studied in the United States, classified by States and by geographic divisions is shown in table 2. Texas reported 103 large-scale farms, the largest number for any single State. California came next with 78, and Alabama third with 68 large-scale farms.

#### By Type of Farming

The 1,116 large-scale farms included in this report represented 61 different types of farming. A more detailed discussion of individual types of farming will occur later on in the report. For certain purposes and for certain tables these 61 types were combined into 10 major type-of-farming groups as follows: Truck, fruit, cotton, cash-grain, other crops, general mixed, dairy, cattle and sheep ranches, poultry, and other livestock. Table 2, already referred to, presents data indicating the number of large-scale farms in each major type-of-farming group and the location of these farms by State and by geographic division. Several rather unlooked-for facts are here presented.

Probably the most common public conception of a large-scale farm is that of a wheat or cash-grain farm. It is interesting to note that the number of such farms, in the sample studied, was far overshadowed by considerably greater numbers of large-scale farms belonging to other types of farming. <sup>5/</sup> For example, there were 345 large cotton farms, 200 large general mixed farms, 124 beef-cattle and sheep ranches, 117 fruit farms, 109 dairy farms, and so on, compared with only 39 cash-grain farms, - out of which only 25 were large-scale wheat farms.

The results of the study of large-scale fruit farms were strikingly similar to those shown in the census monograph on large-scale farming.

Several types of livestock production were included in the "other livestock" farms. The two most important types were beef cattle and hogs, and general livestock, - the latter type meaning ordinarily a general mixture of dairy cows, hogs, sheep, chickens, and sometimes beef animals. The States in which the greatest number of large-scale beef-cattle and hog farms occurred were, Missouri, Iowa, and Nebraska. South Dakota and Nebraska had larger numbers of big "general livestock" farms than any of the other States.

In the cash-grain classification, Louisiana and Arkansas had most of the rice farms. The large-scale wheat farms occurred chiefly in Kansas, Montana, Washington, Texas, and Oklahoma.

The large-scale farms which were grouped together under the classification, "other crops," were pretty well distributed over the United States depending, of course, upon the particular type of crop farm in question. More will be said about these later.

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<sup>5/</sup> This conclusion is also borne out by the census monograph heretofore referred to.



Table 2.- Number of large-scale farms in study, classified by States and by types of farming, 1930 1/

State and division	Large-scale farms classified as -											
	Large-scale farms	Cash crops	Other crops	Gen-eral	Dairy	sheep and	Cattle	Poultry	Other livestock	Number	Number	Number
	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number
Maine	3	1	2	-	-	-	-	-	-	-	-	-
N. H.	5	-	-	-	-	-	-	-	-	2	-	1
Vt.	11	3	-	-	-	-	-	-	-	-	-	3
Mass.	7	-	-	-	1	4	-	-	-	-	-	1
R. I.	2	-	-	-	-	1	-	-	-	-	-	-
Conn.	8	1	4	1	-	2	-	-	-	-	-	-
N. Y.	42	3	-	-	1	26	-	-	-	3	-	3
N. J.	18	1	-	-	-	5	-	-	-	1	-	1
Pa.	22	1	5	1	2	9	-	-	-	3	-	1
N. Atlantic	118	5	27	8	5	54	-	-	-	9	-	10
Ohio	26	2	4	1	9	6	-	-	-	-	-	4
Ind.	20	-	1	-	10	1	-	-	-	-	-	6
Ill.	25	4	2	-	16	1	-	-	-	-	-	2
Mich.	25	2	5	2	4	6	-	-	-	-	-	6
Wis.	17	2	2	-	2	10	1	-	-	-	-	-
E.N. Central	113	10	14	1	41	24	1	-	-	-	-	18
Minn.	16	2	1	1	5	3	-	-	-	-	-	3
Iowa	12	-	-	2	3	1	-	-	-	-	-	6
Mo.	15	-	2	1	4	1	-	-	-	-	-	7
N. Dak.	20	-	-	1	14	1	4	-	-	-	-	-
S. Dak.	17	-	-	1	6	1	2	-	-	-	-	7
Nebr.	30	1	-	1	11	-	9	-	-	-	-	8
Kans.	17	-	1	5	4	1	2	-	-	-	-	4
W.N. Central	127	3	2	8	47	8	17	-	-	-	-	35
Del.	2	-	-	-	-	-	-	-	-	-	-	2
Md.	9	4	1	-	1	3	-	-	-	-	-	-
Va.	26	-	5	2	10	4	-	-	-	-	-	2
W. Va.	6	-	-	-	1	-	1	-	-	-	-	4

- Continued -



Table 2.- Number of large-scale farms in study, classified by States and by types of farming, 1930 1/

State and division	Large-scale farms studied	Large-scale farms classified as -											
		Large-scale farms	Cash-crops	Other crops	Gen-eral	Dairy	sheep	Cattle and	horses	other livestock	other	other	other
		Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number
N. C.	21	-	9	-	1	7	3	-	-	-	-	1	-
S. C.	33	1	31	-	1	-	-	-	-	-	-	-	-
Ca.	53	-	4	45	-	1	2	1	-	-	-	-	-
Fla.	9	2	6	-	-	-	-	-	-	-	-	1	-
S. Atlantic	159	7	16	87	-	6	21	11	1	-	-	10	-
Ky.	30	-	1	-	-	-	26	-	-	-	-	3	-
Tenn.	26	1	-	11	-	-	7	3	-	-	-	4	-
Ala.	68	1	1	63	-	1	2	-	-	-	-	-	-
Miss.	29	-	-	29	-	-	-	-	-	-	-	-	-
E. S. Central	153	2	2	103	-	1	35	3	-	-	-	7	-
Ark.	49	1	1	45	2	-	-	-	-	-	-	-	-
La.	40	-	-	26	5	7	-	2	-	-	-	-	-
Okla.	16	-	-	8	3	-	3	-	-	-	-	2	-
Tex.	103	2	2	66	3	-	9	1	18	-	-	2	-
W. S. Central	202	3	3	145	13	7	12	3	18	-	-	4	-
Mont.	50	-	-	5	-	-	3	-	22	-	-	-	-
Idaho	9	-	1	-	-	-	1	-	5	-	-	2	-
Wyo.	12	-	-	-	-	-	2	-	9	-	-	1	-
Colo.	19	-	-	2	2	4	-	-	8	-	-	3	-
N. Mex.	20	-	-	2	2	3	-	-	13	-	-	-	-
Ariz.	9	1	3	1	-	-	1	1	2	-	-	-	-
Utah	4	-	-	-	-	1	1	-	2	-	-	-	-
Nev.	4	-	-	-	-	-	-	-	4	-	-	-	-
Mountain	107	1	4	5	7	5	15	1	65	-	-	5	-
Wash.	24	-	13	-	3	-	6	2	-	-	-	-	-
Ore.	29	1	4	-	2	1	5	1	15	-	-	-	-
Calif.	78	7	32	4	5	4	13	2	7	-	-	3	-
Pacific	131	8	49	4	10	5	24	5	22	-	-	3	-
All States	1,115	39	117	745	39	40	200	109	124	-	-	93	-

1/ The figures shown were obtained in reply to a large-scale farming questionnaire that was mailed to farmers.





## SIZE OF LARGE-SCALE FARMS

### In the Aggregate

The 1,116 large-scale farms included in this study represented an aggregate area of approximately 15,000,000 acres under direct supervision and control of the owners or managers of these farms. It took approximately 55,000 men as an average labor force for each month of the year to operate these farms. The total capitalization in 1930 of all these farms amounted to approximately \$390,000,000. Data are presented in table 3 which show how large the total size of the combined sample of large-scale farms included in this report was, compared with all farms of all sizes in the United States, classified by types of farming and by geographic divisions. It will be noticed that although the number of large-scale farms represents only 0.02 percent of the total number of farms in the United States, the acreage in these large farms represents 1.50 percent of the total area of farm land in the country.

Large-scale farming seems to have been most important in three types of farming. From the figures presented in table 3, it would appear that larger percentages of the numbers and areas of all livestock ranches, fruit, and truck farming types in the United States were "large-scale" than was true of any of the other types. This conforms to the results found by R. D. Jennings in his Census Monograph, "Large-Scale Farming in the United States, 1929."

From the data in table 3, it is also apparent that larger proportions of the number of farms and total area in farms in the Mountain, Pacific, and West South Central geographic divisions were included in large-scale farms than was true of any of the other divisions of the country. In this respect also, the present study is in agreement with the Census Monograph already mentioned.

Another point of interest in connection with the data presented in table 3 is the fact that these same three geographic divisions of the country were also the divisions in which, from the standpoint of the total value of all farm property, the large-scale farms were most important.

The data presented in table 4 are very similar to the data in table 3, only that the comparison in table 4 in the present case is between the large-scale farms in this report and the large-scale farms as found and reported by R. D. Jennings in the monograph on "Large-Scale Farming in the United States, 1929" as derived from the 1929-30 Census of Agriculture. The present questionnaire study as shown in table 4 reports data from about 14 percent of the large-scale farms in the United States as reported in the Census Monograph. In total acreage, the present study represents approximately 22 percent of the total acreage of large-scale farms as reported by the Census Monograph. Measured in terms of dollars and cents, the large-scale farms included in this report represent something like 21 percent of the total number of all large-scale farms in the United States.

In general, judging from the figures presented in table 4, it can be said that the large-scale farms included in the present questionnaire study were larger on the average than those which were included in the Census Monograph. This simply indicates that the minimum size of a large-scale farm in the present study was somewhat larger than the minimum size of a large-scale farm in the report by R. D. Jennings. If a large proportion of the records which in the present study have been called "Medium" in size were to be included with the large-scale farms in this report, the agreement between the two samples of large-scale farms would be much closer.





Table 3. - Percentage comparison of large-scale farms studied with all farms in the United States <sup>1/</sup> as to number, total acreage of farm land, and value of all farm property, 1930

Type of farming and geographic division	Percentage that -		
	Number of farms studied	Total acreage of farm land studied is of	Total value of all farm property studied is of total value of all farm property
	is of total number of farms	all farm land	2/
	Percent	Percent	Percent
Type of farming:			
Truck	0.05	1.85	<u>3/</u>
Fruit	0.08	1.43	<u>3/</u>
Cotton	0.02	1.27	<u>3/</u>
Cash-grain	0.01	0.25	<u>3/</u>
Other crops	0.01	0.41	<u>3/</u>
General mixed	0.02	1.73	<u>3/</u>
Dairy	0.02	0.24	<u>3/</u>
Cattle and sheep ranches	0.17	3.50	<u>3/</u>
Poultry	0.01	0.09	<u>3/</u>
Other livestock	0.02	0.42	<u>3/</u>
Geographic division:			
North Atlantic	0.02	0.34	0.77
East North Central	0.01	0.25	0.30
West North Central	0.01	0.46	0.25
South Atlantic	0.02	0.58	0.55
East South Central	0.01	0.71	0.87
West South Central	0.02	2.14	1.07
Mountain	0.04	4.06	1.71
Pacific	0.05	2.92	1.73
Average, all States	0.02	1.50	0.66

<sup>1/</sup> Census of Agriculture, 1930.

<sup>2/</sup> These figures for the large-scale farms studied include only the acreage of farm land which was under the direct supervision and control of the owner or manager.

<sup>3/</sup> Information for the United States, classified by type of farming, not available from Federal Census of Agriculture. Hence no comparison was possible.



Table 4. - Percentage comparison of large-scale farms studied with all large-scale farms <sup>1</sup>/<sub>as to number, total acreage of farm land, and value of all farm property, 1930</sub>

Type of farming and geographic division	Percentage that -		
	Number of	Total acreage of	Total value of all
	farms	studied is of	farm property stud-
	total number:	farm land studied	ied is of total
	of large-	of all large-scale	value of all farm
	scale farms	farms 2/	property of large-
	Percent	Percent	scale farms 3/
			Percent
Type of farming:			
Truck	4.97	23.72	4/
Fruit	6.08	11.53	4/
Cotton	5/ 78.23	5/ 181.43	4/
Cash-grain	8.02	19.23	4/
Other crops	5.72	22.78	4/
General mixed	6/ 400.00	6/ 1730.00	4/
Dairy	12.36	34.29	4/
Cattle and sheep ranches	6.78	11.90	4/
Poultry	4.44	22.50	4/
Other livestock	22.79	50.00	4/
Geographic division:			
North Atlantic	15.15	48.57	36.67
North Central	27.84	33.33	53.00
South Atlantic and			
East South Central	39.52	91.43	31.14
West South Central	21.62	16.09	21.84
Mountain	9.52	23.60	25.15
Pacific	3.92	16.04	11.23
Average, all States	14.17	21.74	21.25

1/ Jennings, R. D., "Large-Scale Farming in the United States, 1929," Census Monograph.

2/ The figures which apply to the large-scale farms in the present study include only the acreage of farm land which was under the direct supervision and control of the owner or manager.

3/ The figures in this column represent ratios obtained as follows: The monograph on large-scale farming reports the percentages that the value of land and buildings on large-scale farms are of the value of land and buildings on all farms in the United States, classified by geographic divisions. To obtain the ratios given in column 3 of this table, the percentages given in column 3 of table 3 were divided by the percentages given in the Census Monograph on large-scale farming.

4/ Information for this comparison not available from Census Monograph on large-scale farming.

5/ These large figures were chiefly due to the difficulty and in some cases the impossibility of combining or matching-up individual cropper schedules as taken by the Census, in order that each large cotton plantation might be reported in its entirety.

6/ These figures are largely due to the fact that in numerous instances in the present study it was impossible to determine the exact type of farming to which a given farm should be classified. The farms in this group had several crop and livestock enterprises combined.



## Average Size Per Farm

Data are presented in table 5 which indicate the variation in average size of farms from one type-of-farming group to another.

Table 5. - Average size of large-scale farms studied, by type of farming, 1930

Type of farming	Acreage operated:	Men employed	Capital invested
	per farm 1/ Acres	per farm 2/ Number	per farm 3/ Dollars
Truck .....	1,710	88.2	243,248
Fruit .....	2,240	80.9	293,775
Cotton .....	4,170	65.1	304,387
Cash-grain .....	6,646	16.4	330,484
Other crops .....	5,728	97.9	393,293
General mixed .....	9,645	59.4	398,735
Dairy .....	2,127	20.6	247,732
Cattle and sheep ranches	57,851	22.6	557,167
Poultry .....	1,020	20.8	236,345
Other livestock .....	4,743	25.6	419,592
Average .....	13,265	49.4	348,605

1/ Includes only the acreage which was under the direct supervision and control of the owner or manager.

2/ This figure represents the average number of men employed per farm during the year, and includes operators, managers, and supervisors as well as share or wage hands.

3/ This figure represents the total amount of capital invested in the entire farm business including land.

From the standpoint of acreage alone the beef-cattle and sheep ranches, and the cash-grain farms were the largest. They averaged 57,851 and 6,646 acres per farm respectively. From the standpoint of men employed the truck, fruit, and "other crops" types of farming were the largest - the figures being respectively 88, 81, and 93 men per farm per month. The high figure of 98 men for the "other crops" farms was due largely to the inclusion of several large sugar-beet farms or companies. One sugar-beet company represented approximately 46,000 acres, employed an average of 2,350 men per month



throughout the year, and had a total capital investment of approximately \$3,500,000. It is interesting to note that the large-scale cash-grain farms were operated with the smallest average number of men per month of any of the type-of-farming groups. From the standpoint of capital invested the beef-cattle and sheep ranches ranked the highest of any type-of-farming group, - the figure being approximately \$557,000 as an average of 124 such ranches.

The average size of large-scale farms varied considerably when classified by geographic divisions, as shown in table 6. Much of the variation in size of farm from one section of the country to another was of course due to differences in the type of farming. This is shown roughly in table 5.

Table 6. - Average size of large-scale farms studied, by geographic divisions, 1930

Division <u>1/</u>	Acreage operated:	Men employed:	Capital invested:
	per farm <u>2/</u>	per farm <u>3/</u>	per farm <u>4/</u>
	Acres	Number	Dollars
North Atlantic .....	1,402	64.1	308,636
East North Central .....	2,496	33.3	291,895
West North Central .....	9,674	21.2	350,901
South Atlantic .....	3,150	43.0	155,192
East South Central .....	3,389	53.4	183,209
West South Central .....	18,966	72.0	353,240
Mountain .....	59,798	37.8	520,841
Pacific .....	13,478	53.6	711,183
Average, all States .....	13,265	49.4	348,605

1/ See table 2 for the States included in each of the geographic divisions.

2/ Includes only the acreage which was under the direct supervision and control of the owner or manager.

3/ This figure represents the average number of men employed per farm during the year, and includes operators, managers, and supervisors as well as share or wage hands.

4/ This figure represents the total amount of capital invested in the entire farm business including land.

Although tables 5 and 6 contain data which indicate the average sizes of large-scale farms by type of farming and by geographic divisions they give no idea of the range in size of the distribution of the farms among various size groups. This is done in the frequency distributions which follow.





## Frequency Distributions

As shown in tables 7 and 8 the large-scale farms included in this study were divided into several different size groups on the basis of three measures of size, namely, acres, men, and capital, and were classified by type of farming, (table 7), and by geographic divisions, (table 8).

It is interesting to note in table 7 that the large-scale farms belonging to the 10 different types of farming varied widely in the number of acres operated per farm. This is especially noticeable when the cattle and sheep, and cash-grain types are compared with the fruit, truck, and poultry types of farming. Acreage alone is a fairly good measure of the size of a farm business only when farms belonging to the same type of farming are considered, and even here it should be confined to farms practicing the same phase within the type. This questionnaire study included 190 farms each one of which contained 10,000 acres or more of land that were under the direct supervision and control of the owners or managers of these farms. There were 43 farms of over 50,000 acres each and 5 farms over 500,000 acres each.

As indicated in table 7 there was less extreme variation from type to type in the number of men employed  $6\frac{1}{2}$  per farm and in the total capital invested per farm than there was in the number of acres operated. However, there was considerable variation and this manifested itself in the fact that there were larger percentages of the farms in the truck, fruit, and cotton types of farming which employed an average of 25 or more men per farm through the year than there were in the cash-grain, dairy, or beef-cattle and sheep ranch types of farming. Regarding all of the large-scale farms as a whole there were 104 farms which employed 100 or more men, 8 farms which employed 500 or more, and 2 farms or farming organizations each of which employed 2,000 or more men as an average for each month of the year. One of these occurred in fruit and the other in sugar beets.

From the standpoint of capital invested there were, all told, 169 farms in the present study which represented investments of half a million dollars or more at 1930 values. There were 64 farms each one of which had a capital investment of one million dollars or more on the same basis. The largest farm from the standpoint of capital invested was a \$15,030,000 beef-cattle ranch. There were 18 farms which represented investments of \$3,000,000 or more per farm.

The North Atlantic and the Mountain Divisions represented the extremes as far as acres operated per farm were concerned. The West North Central and the West South Central represented the extremes with reference to the number of men employed per farm. With reference to the total amount of capital invested per farm the South Atlantic States had more farms with small capitalizations than any of the other geographic divisions. The Pacific States had the largest number of farms with extremely high capitalizations. This was true both absolutely and relatively.

## TYPE OF OWNERSHIP

It is a mistake to think of large-scale farming wholly in terms of corporation farming. To be sure, a large proportion of corporation farms are large farms, but, on the other hand, a relatively small percentage of large-scale farms are incorporated. Of the 390 corporation farms studied, only 2 percent were small farms, 25 percent were medium in size, and 73 percent were large scale. This, among other things, is shown in table 9. However, as is shown in table 10, only 25 percent of the 1,115 large-scale farms studied were incorporated. The larger proportion, 54 percent, were individually owned.

6/ This figure represents the average number of men employed per farm per month as an average for the 12 months. In addition to wage and share hands it includes managers, foremen, and supervisors as well as the owner-operators.



Table 7. - Number of large-scale farms in study, classified by acreage operated, men employed, capital invested, and by type of farming, 1930

Item	Large-scale farms classified as -													
	: Large- scale farms studied	: Truck	: Fruit	: Cotton	: Cash- grain	: Other crops	: Gen- eral	: Dairy	: Sheep	: Poul- try	: Other livestock			
Acres operated:	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number
Under 50	2	-	-	-	-	-	-	-	-	-	-	2	-	-
50 to 99	2	-	-	-	-	-	-	1	-	-	-	1	-	-
100 to 149	2	1	-	-	-	-	-	-	-	-	-	1	-	-
150 to 199	3	-	3	-	-	-	-	-	-	-	-	-	-	-
200 to 299	16	1	13	-	-	1	-	-	-	-	-	1	-	-
300 to 399	19	2	12	-	-	1	-	-	-	-	-	-	-	-
400 to 499	20	-	11	2	-	2	1	3	-	-	-	-	1	-
500 to 599	45	3	12	7	-	2	5	13	-	-	-	1	2	-
700 to 999	108	4	16	38	-	6	17	23	-	-	-	1	3	-
1,000 to 2,499	381	16	38	152	4	9	69	49	1	3	40	-	-	-
2,500 to 4,999	210	7	6	90	10	10	45	12	5	-	25	-	-	-
5,000 to 9,999	118	3	3	35	14	4	35	3	10	-	11	-	-	-
10,000 to 24,999	99	2	2	15	8	4	15	1	42	-	10	-	-	-
25,000 to 49,999	48	-	1	6	1	1	7	-	31	-	1	-	-	-
50,000 to 99,999	23	-	-	-	2	-	4	-	17	-	-	-	-	-
100,000 to 199,999	7	-	-	-	-	-	-	-	7	-	-	-	-	-
200,000 to 299,999	4	-	-	-	-	-	1	-	3	-	-	-	-	-
300,000 to 499,999	4	-	-	-	-	-	-	-	4	-	-	-	-	-
500,000 and over	5	-	-	-	-	-	1	-	4	-	-	-	-	-
Total	1,116	39	117	345	39	40	200	109	124	10	93	-	-	-

Number of men employed:

Under 5.0	26	-	-	2	2	-	6	1	10	-	5	-	-	-
5 to 9.9	185	-	-	5	16	2	60	16	41	5	40	-	-	-
10 to 14.9	173	2	11	21	9	8	45	34	22	1	20	-	-	-
15 to 19.9	111	3	12	26	4	4	21	19	14	-	8	-	-	-
20 to 24.9	84	2	12	35	-	2	15	6	7	2	3	-	-	-
25 to 49.9	276	14	42	124	4	8	29	22	20	1	12	-	-	-

- Continued -



Table 7. - Number of large-scale farms in study, classified by acreage operated, men employed, capital invested, and by type of farming, 1930 - Continued

Item	Large-scale farms classified as -													
	Large-scale farms	Truck farms	Fruit	Cotton	Cash grain	Other crops	Gen-eral	Dairy	Cattle and sheep	Poultry	Other livestock	Number	Number	Number
Number of men employed:	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number
Cont'd														
50 to 74.9	105	7	15	55	2	4	8	5	4	1	4			
75 to 99.9	52	1	11	30	2	1	5	2	-	-	-			
100 to 249.9	77	7	11	37	-	6	8	3	4	-	1			
250 to 499.9	19	3	-	6	-	4	3	1	2	-	-			
500 to 999.9	5	-	2	3	-	-	-	-	-	-	-			
1,000 to 1,999.9	1	-	-	1	-	-	-	-	-	-	-			
2,000 and over	2	-	1	-	-	1	-	-	-	-	-			
Total	1,116	29	117	345	39	40	200	109	124	10	93			
Capital invested:														
Under \$50,000	100	4	5	70	-	3	9	2	4	1	2			
\$50,000 to \$74,999	112	4	7	62	4	3	17	5	4	2	4			
\$75,000 to \$99,999	90	5	3	38	3	2	18	5	7	-	9			
\$100,000 to \$149,999	219	7	24	62	6	6	50	21	17	3	23			
\$150,000 to \$199,999	112	4	13	24	3	1	13	24	10	1	13			
\$200,000 to \$299,999	194	7	23	50	11	6	36	27	18	1	15			
\$300,000 to \$399,999	76	2	9	11	5	6	13	9	12	1	8			
\$400,000 to \$499,999	44	2	4	7	2	4	6	4	12	-	3			
\$500,000 to \$749,999	70	2	13	12	3	2	11	5	13	1	6			
\$750,000 to \$999,999	35	-	7	3	-	4	5	4	7	-	5			
\$1,000,000 to \$1,499,999	29	1	6	2	1	-	6	2	9	-	2			
\$1,500,000 to \$1,999,999	9	-	-	1	-	1	2	-	5	-	-			
\$2,000,000 to \$2,999,999	8	1	-	-	-	1	2	1	2	-	1			
\$3,000,000 and over	18	-	3	3	1	1	6	-	4	-	-			
Total	1,116	39	117	345	39	40	200	109	124	10	93			



Table 8. - Number of large-scale farms in study, classified by acres operated, men employed, capital invested, and by geographic divisions, all States, 1930 1/

Item	Large-scale farms classified by geographic divisions -									
	farms studied	North Atlantic	E. N. Central	W. N. Central	S. Atlantic	E. S. Central	W. S. Central	Pacific	Number	Percentage
	Number	Number	Number	Number	Number	Number	Number	Number	Number	Percentage
Acres operated:										
Under 50	2	2	-	-	-	-	-	-	-	-
50 to 99	2	2	-	-	-	-	-	-	-	-
100 to 149	2	2	-	-	-	-	-	-	-	-
150 to 199	3	-	-	-	-	-	-	-	3	3
200 to 299	16	9	-	-	1	-	-	1	5	5
300 to 399	19	8	2	1	1	1	-	2	4	4
400 to 499	20	8	3	-	3	1	-	-	4	4
500 to 699	45	12	9	-	5	6	7	-	6	6
700 to 999	108	23	14	1	16	21	21	1	11	11
1,000 to 2,499	381	37	57	32	80	69	72	5	29	29
2,500 to 4,999	210	11	16	39	36	32	51	10	15	15
5,000 to 9,999	118	3	6	25	10	35	22	19	18	18
10,000 to 24,999	99	-	6	20	5	5	20	27	16	16
25,000 to 49,999	48	1	-	5	1	2	8	19	12	12
50,000 to 99,999	23	-	-	4	1	-	-	11	7	7
100,000 to 199,999	7	-	-	-	-	-	1	6	-	-
200,000 to 299,999	4	-	-	-	-	1	-	3	-	-
300,000 to 499,999	4	-	-	-	-	-	-	1	-	-
500,000 and over	5	-	-	-	-	-	2	2	1	1
Total	1,116	118	113	127	159	153	208	107	131	131
Number of men employed:										
Under 50	26	1	-	10	1	2	3	3	6	6
5 to 99	185	16	29	49	5	10	16	36	24	24
10 to 149	173	32	25	33	15	21	20	16	11	11
15 to 199	111	14	14	9	23	15	12	16	8	8
20 to 249	84	7	9	4	22	15	13	5	9	9
25 to 499	275	25	21	12	54	40	69	17	37	37
50 to 749	105	7	7	4	18	24	30	3	12	12
75 to 999	52	4	2	2	10	9	14	2	9	9
100 to 249.9	77	8	4	3	9	14	24	5	10	10
250 to 499.9	19	2	1	1	2	2	5	3	3	3
500 to 999.9	5	-	1	-	-	1	-	1	2	2
1,000 to 1,999.9	1	-	-	-	-	-	-	-	-	-
2,000 and over	2	1	-	-	-	-	1	-	-	-
Total	1,116	118	113	127	159	153	208	107	131	131

- Continued -







Table 8. - Number of large-scale farms in study, classified by acres operated, men employed, capital invested, and by geographic divisions, all States, 1930 1/ - Continued

Item	Large-scale farms classified by geographic divisions -											
	farms studied	North Atlantic	E.N. Central	W.N. Central	S. Atlantic	E.S. Central	W. S. Central	Mountain	Pacific			
Capital invested:	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number
Under \$50,000	100	6	-	4	4	34	33	19	4	-	-	-
\$50,000 to \$74,999	112	11	8	4	4	31	24	27	4	3	3	3
\$75,000 to \$99,999	90	8	4	4	10	16	24	19	7	2	2	2
\$100,000 to \$149,999	219	26	32	26	30	30	23	46	20	16	16	16
\$150,000 to \$199,999	112	21	18	13	13	13	9	17	9	12	12	12
\$200,000 to \$299,999	194	22	25	27	19	19	26	35	17	23	23	23
\$300,000 to \$399,999	76	5	9	13	5	5	6	11	12	15	15	15
\$400,000 to \$499,999	44	4	5	4	1	1	2	9	8	11	11	11
\$500,000 to \$749,999	70	7	4	13	5	5	2	11	6	22	22	22
\$750,000 to \$999,999	35	3	3	8	3	3	1	4	5	8	8	8
\$1,000,000 to \$1,499,999	29	1	4	1	1	1	1	3	9	9	9	9
\$1,500,000 to \$1,999,999	9	2	-	2	1	1	1	1	2	-	-	-
\$2,000,000 to \$2,999,999	8	1	-	1	1	-	-	2	-	4	4	4
\$3,000,000 and over	18	1	1	1	1	-	1	4	4	6	6	6
Total	1,116	118	113	127	159	153	208	107	131			

1/ See table 2 for the States included in each geographic division.



Table 9. - Number of farms studied of designated types of ownership, distributed by size, all States, 1930

Type of ownership	All farms classified as -							
	All farms in study		Small		Medium		Large-scale	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Corporation	390	100.0	8	2.1	98	25.1	284	72.8
Partnership	619	100.0	63	10.2	359	58.0	197	31.8
Individual	2,510	100.0	543	21.6	1,366	54.4	601	24.0
Other 1/	62	100.0	5	8.1	23	37.1	34	54.8
Total or average	3,581	100.0	619	17.3	1,846	51.5	1,116	31.2

1/ Includes farms of estate ownership, trust ownership, and combinations of corporation and partnership, corporation and individual, and partnership and individual ownerships.

Table 10. - Number of large-scale farms studied by geographic divisions, distributed by type of ownership, 1930

Geographic division	Large-scale farms classified as -									
	Large-scale farms in study		Corporation		Partnership		Individual		Other 1/	
	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent
N. Atlantic	118	100.0	31	26.3	14	11.9	69	58.4	4	3.4
E. N. Central	113	100.0	31	27.4	18	15.9	60	53.1	4	3.6
W. N. Central	127	100.0	28	22.1	23	18.1	70	55.1	6	4.7
S. Atlantic	159	100.0	29	18.2	22	13.9	104	65.4	4	2.5
E. S. Central	153	100.0	18	11.8	28	18.3	102	66.6	5	3.3
W. S. Central	208	100.0	30	14.4	48	23.1	121	58.2	9	4.3
Mountain	107	100.0	55	51.4	18	16.8	34	31.8	-	-
Pacific	131	100.0	62	47.3	26	19.9	41	31.3	2	1.5
All States	1,116	100.0	284	25.4	197	17.7	601	53.9	34	3.0

1/ See footnote table 9.



It is rather interesting to observe the manner in which the type of ownership of large-scale farms changed from one geographic division to another. As indicated in table 10 the corporate type of ownership stood out more strikingly in the Mountain and Pacific Divisions than in any of the others. The corporate form of ownership seems to have been the least important in the East South Central States. In the latter division the large-scale farms were owned mostly by individuals. In fact this group of States stands out as having the highest percentage of individual ownership of any division. Partnerships seem to have been relatively most numerous in the West South Central Division which comprises Arkansas, Louisiana, Oklahoma, and Texas.

The type of ownership on the large-scale farms studied varied considerably also among different types of farming. As indicated by the data presented in table 11 a larger proportion of the "other crops" farms were owned by corporations than was true of any of the other type-of-farming groups. This high figure, of 57.5 percent corporately owned, was largely due to the fact that 6 out of the 7 large-scale sugarcane plantations were incorporated. Corporate ownership was especially important also in the fruit, truck, and beef-cattle and sheep ranch types. The partnership form of ownership appeared to be most important in the beef-cattle and sheep ranches. Individually owned large-scale farms were relatively more important in the cotton and poultry types than in any of the other types of farming. Two hundred thirty-one of the 345 large-scale cotton farms or plantations were owned by individuals. This represents 87 percent. In contrast, only 37 ranches or approximately 30 percent of the 124 beef-cattle and sheep ranches were owned by individuals.

Table 11. - Number of large-scale farms studied by types of farming, distributed by type of ownership, 1930

Type of farming	Large-scale farms in study		Large-scale farms classified as -							
	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent
Truck	39	100.0	17	43.6	8	20.5	13	33.4	1	2.5
Fruit	117	100.0	54	46.2	20	17.1	42	35.9	1	.8
Cotton	345	100.0	40	11.6	64	18.5	231	67.0	10	2.9
Cash-grain	39	100.0	10	25.6	4	10.3	22	56.4	3	7.7
Other crops <sup>2/</sup>	40	100.0	23	57.5	4	10.0	13	32.5	-	-
General mixed	200	100.0	39	19.5	35	18.0	118	59.0	7	3.5
Dairy	109	100.0	31	28.5	13	11.9	59	54.1	6	5.5
Cattle and sheep ranches	124	100.0	53	42.8	30	24.2	37	29.8	4	3.2
Poultry	10	100.0	2	20.0	1	10.0	7	70.0	-	-
Other live-stock	93	100.0	15	16.1	17	18.3	59	63.4	2	2.2
Total or average	1,116	100.0	284	25.4	197	17.7	601	53.9	34	3.0

<sup>1/</sup> See footnote table 9.

<sup>2/</sup> Includes chiefly, general tobacco, and sugarcane types of farming.



As mentioned before, taking all the large-scale farms together as one group, there were over twice as many farms individually owned as were corporately owned. This was true to a far greater extent in the small and medium-sized farms. As indicated in table 12 the small farms were 87.7 percent individually owned as against 1.3 percent corporately owned. The figures for the medium farms were 74.0 and 5.3 percent, respectively. Much has been said about the growth and the importance of corporation farming in the United States. The figures here quoted give some idea of its importance. If anything they exaggerate the importance of corporation farming in the United States. <sup>7/</sup> This, of course, is largely due to the fact that the present study was conducted primarily for the purpose of securing information about large-scale farms and for this reason a greater proportion of the large-scale farms of the country are represented in this study than is true of the medium and small farms. The 390 corporation farms of all sizes included in this report represented in 1929-30 a little more than 4 percent of the total number of corporation farms then in existence in the United States.

Table 12. - Number of farms studied of designated size, distributed by type of ownership, 1930

Size of farms	All farms		Percentage of farms classified as -				
	in study		Corpora-	Partner-	Indi-	Other	
	Number	Percent	tion	ship	vidual	1/	
			Percent	Percent	Percent	Percent	Percent
Small	619	100.0	1.3	10.2	87.7	0.8	
Medium	1846	100.0	5.3	19.4	74.0	1.3	
Large-scale	1116	100.0	25.4	17.7	53.9	3.0	
Total or average	3581	100.0	10.9	17.3	70.1	1.7	

1/ See footnote table 9.

7/ According to the 1929-30 Federal Census of Agriculture there were 6,288,648 farms in the United States. According to a report entitled "Statistics of Income for 1929" published by the Bureau of Internal Revenue, United States Treasury Department, there were in 1929 a total of 9,211 corporations engaged in farming in the United States that reported income tax information to the Bureau. This figure includes 3,886 corporations reporting net incomes, 4,397 reporting no net incomes, and 928 inactive corporations. Since all corporations in the United States, with minor exceptions only, must report income tax information to the Bureau of Internal Revenue, the above figures applying to corporations engaged in farming may be taken as representing essentially the actual number of such corporations in existence in 1929 in the United States. Therefore, it can be said with a reasonable degree of accuracy that in 1929 only about 0.15 percent of the total number of farms in the United States were incorporated.





## TYPE OF OPERATION

## By Geographic Divisions

As a whole, the large-scale farms were operated chiefly with hired labor. This was done in preference to utilizing other methods of operation such as tenants, croppers, fifty-fifty stock share lease agreements, etc. However, as indicated in table 13, there was considerable variation between geographic divisions and between different types of ownership in this respect; and furthermore, between different types of farming, as will be shown later.

Table 13. - Number of large-scale farms in study, distributed by type of operations, 1930

		Percentage of large-scale farms operated by -									
Geographic divisions and type of ownership	Large-scale farms in study	Hired:		Tenants:		Hired labor:		Tenants and croppers:		Hired labor and tenants	
		labor, exclu-		and pers		and labor		croppers, and		tenants	
		sively		ten-		(share-crop-		exclu-		and	
		sively:		ants: hands)		pers		sively		croppers	
		Num-ber	Per-cent	Per-cent	Per-cent	Per-cent	Per-cent	Per-cent	Per-cent	Per-cent	Per-cent
Geographic Division:											
N. Atlantic	118	100.0	81.4	0.8	13.6	-	3.4	0.8	-	-	-
E.N. Central	113	100.0	58.4	6.2	31.8	-	1.8	-	-	1.8	-
W.N. Central	127	100.0	44.1	7.9	45.6	0.8	0.8	0.8	-	-	-
S. Atlantic	159	100.0	27.0	1.9	22.0	1.3	23.9	0.6	-	23.3	-
E.S. Central	153	100.0	8.5	2.0	26.1	1.3	20.9	-	-	41.2	-
W.S. Central	208	100.0	16.8	1.9	22.1	2.4	22.1	3.9	-	30.8	-
Mountain	107	100.0	61.7	2.8	33.6	-	-	-	-	1.9	-
Pacific	131	100.0	66.4	1.5	27.5	0.8	2.3	-	-	1.5	-
All States:	1,116	100.0	41.4	5.0	27.1	1.0	11.3	1.0	-	15.2	-
Type of ownership:											
Corporation:	284	100.0	57.0	0.7	29.9	0.7	5.3	0.4	-	6.0	-
Partnership:	197	100.0	38.1	3.1	29.4	2.5	12.7	-	-	14.2	-
Individual:	601	100.0	36.3	3.8	24.1	0.7	13.6	1.5	-	20.0	-
Other	34	100.0	20.6	5.9	44.1	-	11.8	2.9	-	14.7	-

In the West North Central Division there were more farms which were operated with a combination of hired labor and tenants than in any other division. More will be said a little later about the specific types of rental agreements which were employed in various localities and under different types of farming. The three southern divisions, of course, were the ones in which greatest reliance was placed upon the use of small share tenants and croppers and where the least reliance was placed upon the exclusive use of hired labor as a method of farm operation.

An examination of the records from medium and small farms established the fact that there was a close correspondence, by geographic divisions, in the types of operation employed on the medium and small farms with the types of operation employed on the large-scale farms with one general exception. This exception was the fact that as the farms became smaller there was a tendency



for them to utilize a higher and higher percentage of hired labor in the operation of the farm. A comparison of the small, medium, and large-scale farms with reference to the various types of operation used is presented in table 14.

Table 14. - Percentage distribution of number of small, medium, and large-scale farms studied, by type of operation, 1930

Type of operation			Percentage of all -			
	All farms		Small	Medium	Large-scale	
	in study		farms	farms	farms	
	Number	Percent	Percent	Percent	Percent	
Hired labor, exclusively <sup>1/</sup>	2,138	59.7	74.6	65.8	41.4	
Tenants exclusively	82	2.3	1.8	2.0	3.0	
Hired labor and tenants	822	23.0	14.9	23.1	27.1	
Croppers (share hands)	14	0.4	-	0.2	1.0	
Hired labor and croppers	255	7.1	6.5	4.8	11.3	
Tenants and croppers,						
exclusively	16	0.4	-	0.3	1.0	
Hired labor and tenants						
and croppers	254	7.1	2.2	3.8	15.2	
Total	3,581	100.0	100.0	100.0	100.0	

<sup>1/</sup> This classification includes all farms, the owners or managers of which employed workers exclusively on a wage basis if and when any additional or outside help was needed over and above the labor performed by themselves or by their families. It includes also all of the farms wherein the owner or operator with the help of either's family was able to perform all of the farm work.

#### By Ownership

A greater percentage of the corporation farms were operated with hired labor exclusively than was true of any of the other groups. This is shown in the lower part of table 13. The large-scale farms which were owned by partnership and those owned by individuals were operated to a much larger extent than the corporation farms, with combinations of hired labor with tenants and with croppers.

#### By Types of Farming

As mentioned previously, there was an extremely wide variation between different types of farming in the type or method of farm operation practiced by the large-scale farms in this study. At one extreme, as shown in table 15, 90 percent of the large-scale poultry farms were operated exclusively with hired labor. Approximately 85 percent of the large-scale fruit farms and 77 percent of the large-scale truck farms were operated with hired labor. There were individual types of farming within each of the three type-of-farming groups which ran as high as 90 percent and higher in this respect. Large-scale dairy farms and livestock ranches came next in importance which hired labor played in their operation. The above figures would seem to indicate that there were certain inherent conditions or aspects with regard to large-scale poultry, fruit truck, dairy farms, and beef-cattle and sheep ranches which made it advisable for the owner or operator on each of these farms to keep in the very closest



touch with the men who were actually doing the manual work. As a general rule this could best be accomplished through the use of hired men directly responsible, in every particular, to the foreman or manager of each large-scale farm.

Table 15. - Number of large-scale farms studied by types of farming, distributed by type of operation, 1930

Type of farming	Large-scale farms in study	Percentage of large-scale farms operated by -							
		Hired labor, exclu- sively	Tenants (North- ern States)	labor and tenants (North- ern States)	Crop- pers or share hands (North- ern States)	Hired labor and crop- pers or share hands	Tenants and crop- pers or share hands	labor and croppers	Hired labor and tenants
		Number	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Truck		39	100.0	76.9	-	18.0	-	5.1	-
Fruit		117	100.0	85.5	0.8	11.1	-	2.6	-
Cotton		345	100.0	2.3	2.3	20.0	3.2	28.4	41.2
Cash-grain		39	100.0	51.3	7.7	38.4	-	-	2.6
Other crops		40	100.0	55.0	2.5	37.5	-	-	5.0
General mixed		200	100.0	37.5	5.5	40.0	-	7.5	9.0
Dairy		109	100.0	64.2	3.7	26.6	-	2.8	1.8
Cattle and sheep ranches		124	100.0	66.1	-	29.1	-	1.6	3.2
Poultry		10	100.0	90.0	-	10.0	-	-	-
Other livestock		93	100.0	49.5	5.4	40.8	-	3.2	1.1
Total or average		1,116	100.0	41.4	3.0	27.1	1.0	11.3	15.2

At the other extreme, as indicated in table 15, only 2.3 percent of the large-scale cotton farms or plantations were operated exclusively with hired labor. Instead, these cotton farmers used a combination of either hired labor and tenants, hired labor and croppers or share hands, or a combination of all three, namely, hired labor, tenants, and croppers. In other words the nature of the operations on large-scale cotton farms were such that they could be delegated in a large degree to tenants or croppers and did not require as close supervision as a system of hired labor exclusively was capable of administering.

In connection with the above discussion it is well to keep in mind that only about 8 percent of the total acreage in all of the large-scale farms studied was rented out to others. This varied from 39 percent in the case of large-scale cotton farms to 2 percent in the case of beef-cattle and sheep ranches. On the whole 70 percent, and in the case of cotton farms 94 percent, of the entire area which was thus rented out to others was kept under the close supervision and control of the owner or manager.





## Closeness of Supervision and Control

Out of an approximate total of 15,000,000 acres which comprised the area of the large-scale farms studied, and which represented land under the direct and under the indirect but close supervision and control of the owners or managers of these farms, 94.4 percent was operated with labor under the strictest kind of supervision and control, namely, hired labor. The other 5.6 percent of the entire area operated by the large-scale farms was done so with closely supervised tenants, croppers, or share hands. There was considerable variation between geographic divisions and between types of farming in the proportionate use made of hired labor as a means of operating large-scale farms.

As indicated in table 16, 38 percent of the acreage in the large-scale cotton farms was operated with closely supervised tenants, croppers, or share hands. In other words the cotton farms relied the least upon the exclusive use of hired labor of any type-of-farming group in this study. This is especially significant in the face of the fact that the large-scale poultry farms, cattle and sheep ranches, and fruit farms were almost entirely operated with hired labor.

Table 16. - Percentage of acreage of large-scale farms studied, operated with hired labor, and with closely supervised tenants, croppers, or share hands, 1930

Geographic division and type of farming	Acreage		Percentage of acreage operated with -	
	: Large-scale: farms : in study	: of large- scale : farms : operated	: Closely supervised Hired labor, : tenants, croppers, exclusively 1/ : or share hands	
	: Number	: Percent	: Percent	: Percent
Geographic division:	:	:	:	:
N. Atlantic	: 118	: 100.0	: 91.1	: 8.9
E. N. Central	: 113	: 100.0	: 82.8	: 17.2
W. N. Central	: 127	: 100.0	: 91.7	: 8.3
S. Atlantic	: 159	: 100.0	: 76.3	: 23.7
E. S. Central	: 153	: 100.0	: 64.2	: 35.8
W. S. Central	: 208	: 100.0	: 94.3	: 5.7
Mountain	: 107	: 100.0	: 98.7	: 1.3
Pacific	: 131	: 100.0	: 96.7	: 3.3
All States	: 1,116	: 100.0	: 94.4	: 5.6
Type of farming:	:	:	:	:
Truck	: 39	: 100.0	: 86.9	: 13.1
Fruit	: 117	: 100.0	: 95.3	: 4.7
Cotton	: 345	: 100.0	: 62.0	: 38.0
Cash-grain	: 39	: 100.0	: 87.2	: 12.8
Other crops	: 40	: 100.0	: 89.6	: 10.4
General mixed	: 200	: 100.0	: 92.4	: 7.6
Dairy	: 109	: 100.0	: 82.7	: 17.3
Cattle and sheep ranches	: 124	: 100.0	: 99.6	: .4
Poultry	: 10	: 100.0	: 100.0	: -
Other livestock	: 93	: 100.0	: 92.4	: 7.6

1/ This classification includes all farms the owners or managers of which employed workers exclusively on a wage basis if and when any additional or outside help was needed over and above the labor performed by themselves or by their families. It includes also all of the farms wherein the owner or operator with the help of either's family was able to perform all of the farm work.









Cash rent was the second most popular type of rental used by the owners or managers of the large-scale farms studied. As a general rule, of course, land which was rented out to others on a cash rental basis could not be and was not included in the acreage under the direct and close supervision of the owner or manager of large-scale farms. The cash rental form of agreement is mentioned here only to help show the relative degree to which various forms of rental were resorted to by owners or managers of large-scale farms. Cash rent seemed to have been most common in the Pacific, West South Central, and North Atlantic geographic divisions and in the poultry, cattle and sheep ranches, and fruit farms. It seemed to have been least important in the West North Central States and in the cash-grain type of farming.

Next in order of importance, as shown in table 17, was the one-fourth type of rental. This was quite prevalent in the South where it generally occurred as "one-fourth of the cotton and one-third of the corn." Under this system the landlord received one-fourth or one-third of the crop. The one-fourth type of rental was also especially important in the Pacific Division where, in California, approximately 50 percent of the land rented out to others was done so on this basis. The one-fourth type of rental seemed to have been most important in the cash-grain, fruit, and cotton types of farming.

The one-half share rental agreement wherein the tenant furnishes his own workstock and equipment was most common in the North Atlantic, East North Central, and West North Central States, and in the general mixed, "other livestock," and dairy types of farming.

Another important type of rental found on the large-scale farms studied was that of the fifty-fifty livestock share lease agreement. One of the significant features of such a lease is the fact that the landlord and the tenant usually share, on a fifty-fifty basis, the items of investment, receipts, and expenses in connection with all livestock other than workstock. This type of lease permits or really, one might say, makes it imperative for the landlord to take a personal and active interest in the various operations of the business. It gives the tenant the opportunity of taking advantage of the owner's advice and financial assistance and by putting more of himself into the business the owner can often realize a much higher return on his investment than he could by following a system of rental whereby his only contribution toward the management of the farm might be through some meager suggestions of his imparted to the tenant once or twice a year at a time when the rental agreement is decided upon or the payment of such rental is made. The fifty-fifty livestock share lease was most popular in the East North Central and the West North Central Divisions. This form of rental was very common on the large-scale dairy and on the large-scale general mixed or diversified farms producing different combinations of livestock or livestock products and field crops.

This form of rental agreement really offers a connecting link between the old-fashioned system of landlordism and a system which can be called a phase of large-scale farming wherein the owner or manager of a number of farms exercises full or at least very close supervision and control over the men who are actually doing the manual labor.



TRACTS OF LAND, FARMING UNITS, AND DISTANCE BETWEEN UNITS  
FARTHEST APART, - PER FARM

On the average each of the 1,116 large-scale farms included in this report was composed of approximately nine separate tracts of land and was operated as approximately six separate farming units. The average distance between the two most widely separated units on each large-scale farm was about 23 miles. The data contained in table 18 present a comparison between small, medium, and large-scale farms with reference to the items just mentioned. As might have been expected, the number of separate tracts of land per farm, the number of farming units per farm, and the distance between units per farm, all increased as the size of the farms became larger.

Table 18. - Number of tracts, farming units, and distance between units .  
per farm for all farms studied, 1930 1/

Size of farms	: : Separate tracts : of land : per farm	: : Farming units : per farm :	: : Distance between : the two most widely : separated units : per farm
	: : Number	: : Number	: : Miles
Small	: : 2.5	: : 1.9	: : 1.9
Medium	: : 3.2	: : 2.2	: : 5.2
Large-scale	: : 9.4	: : 5.8	: : 22.7

1/ The data presented in this table are true averages.

Geographically speaking, the data presented in table 19 indicate on the whole that the large-scale farms situated east of the Mississippi River had fewer separate tracts of land per farm than those west of the Mississippi River.

Undoubtedly many of the variations by geographic divisions were largely the result of, or highly associated with, the different types of farming found in these areas. For example, as shown in table 19, the fruit, cash-grain, and livestock ranch types of farming were the ones which had the largest number of separate tracts of land. Most of these farms occurred west of the Mississippi River.





The cotton farms had the largest number of farming units per farm of any type of farming. Since cotton was the predominating type of farming in the three southern divisions this fact goes a long way in helping to explain why the large-scale farms in the South had the largest number of farming units per farm. This, of course, was due to the large number of croppers per farm or plantation. The four classes of livestock farming, namely, dairy, beef-cattle and sheep, poultry, and other livestock, had the smallest number of separate farming units per farm. This suggests the advisability in livestock production of delegating authority to just as few separate heads as possible. In most cases livestock production would fail if it were carried on in a manner similar to that of cash-grain or cotton production with a large number of separate farming units involved.

The large-scale farms on which the separate farming units were farthest apart were the general mixed or diversified farms which occurred mostly in the North Central States. This figure of 33.7 miles is shown in table 19. Next in order of greatest distances between farming units came in the beef-cattle and sheep ranches, the cotton farms, and the fruit farms. Since most of the livestock ranches and a very large proportion each of the cotton and fruit farms were located in one or more of the West South Central, Mountain, and Pacific geographic divisions it helps to explain why these divisions along with the North Central Divisions, as mentioned above, were the divisions in which the farming units per farm were farthest apart. In this connection it should be mentioned that there were a few large-scale farms which had their various separate farming units scattered over several States. The distances in such cases between the two most widely separated units on each farming organization ran into hundreds of miles in some cases and in at least one case more than 1,000 miles. Such distances which occurred on these very few and very exceptional cases were left out of the tabulations just discussed in an effort to make the rest of the data more comparable.

In table 19 the data on tracts, units, and distance apart are classified also according to type of ownership. In every case the corporations had the highest figures and the individually owned large-scale farms had the smallest figures. This, undoubtedly, was due in some measure to the types of farming involved. Also it is probable that the corporate form of ownership and operation made it more feasible to operate a larger number of units and at greater distances apart than could have been done so readily on individually owned establishments.

#### PRINCIPAL SOURCE OF INCOME OF OWNER

There are many farms in the United States the owners of which do not receive the major portions of their incomes from farming. There are, for example, farms or country estates run chiefly for pleasure. There are numerous milk distributors, real estate dealers, bankers, professional men, etc., who operate farms.





Table 19. - Number of tracts, farming units, and distance between units per farm, for large-scale farms studied, 1930

Geographic division, type of farming, and type of ownership	: Separate tracts of land per farm	: Farming units per farm	: Distance between the two most widely separated units per farm
	: Number	: Number	: Miles
Geographic division:			
N. Atlantic	: 6.1	: 4.3	: 11.2
E. N. Central	: 7.3	: 4.2	: 24.5
W. N. Central	: 15.5	: 4.0	: 35.8
S. Atlantic	: 9.6	: 7.7	: 10.0
E. S. Central	: 6.2	: 7.1	: 15.4
W. S. Central	: 11.6	: 7.1	: 26.0
Mountain	: 6.9	: 5.6	: 34.0
Pacific	: 10.1	: 5.0	: 28.4
Average, all States	: 9.4	: 5.8	: 22.7
Type of farming:			
Truck	: 10.8	: 7.8	: 11.8
Fruit	: 24.6	: 6.0	: 21.6
Cotton	: 9.6	: 10.1	: 27.4
Cash-grain	: 11.4	: 7.0	: 18.6
Other crops	: 8.2	: 5.5	: 16.0
General mixed	: 5.4	: 8.6	: 38.7
Dairy	: 4.6	: 3.1	: 12.0
Cattle and sheep ranches	: 11.1	: 4.0	: 32.3
Poultry	: 2.4	: 2.2	: 14.8
Other livestock	: 3.5	: 2.4	: 8.7
Type of ownership:			
Corporation	: 17.3	: 6.1	: 38.5
Partnership	: 5.2	: 5.1	: 21.1
Individual	: 5.2	: 4.6	: 19.3
Other	: 17.0	: 5.8	: 30.4



In the present study it was found that only about 73 percent of the large-scale farms were strictly farming propositions. In the remainder of cases the principal source of income of the owner was something other than farming. As shown in table 20, there were a considerable number of large-scale farms operated by bankers, professional men, manufacturers, and others. There was a tendency for such farms to be more numerous among the large-scale farms than among the medium or the small farms.

Table 20. - Percentage distribution of number of small, medium, and large-scale farms studied, by principal source of income of owner, 1930

Principal source of income of owner	Percentage of all -		
	Small	Medium	Large-scale
	farms	farms	farms
	Percent	Percent	Percent
Strictly farming	83.5	82.0	73.3
Country estate	-	0.4	0.5
Life insurance company	-	0.2	0.2
Livestock dealer; milk dealer or distributor	0.2	0.2	0.6
Lumbering; forest products; mining; oil; distillery	1.9	1.8	1.4
Investment business; stocks; bonds; banker	2.4	4.8	7.7
Real estate dealer	-	0.3	1.0
Professional; salary; merchandizing; manufacturing; business	9.4	9.1	12.8
Miscellaneous	2.6	1.2	2.5
Total	100.0	100.0	100.0

As indicated in table 21, the Mountain, Pacific, and West North Central geographic divisions had relatively fewer large-scale farms that could not qualify as strictly farming propositions than any other geographic division. The North Atlantic and South Atlantic Divisions were the ones which seemed to have the largest relative numbers of large-scale farms owned and operated by those who did not receive the major portion of their incomes from farming.

As indicated in the lower half of table 21, the types of farming which seemed to be most immune from "non-farm" ownership were the large-scale poultry farms, beef-cattle and sheep ranches, and the fruit farms. The "other crops" type-of-farming group was the one in which the largest percentage of the farms were owned by individuals or organizations which derived most of their income from sources other than farming. This was due largely to the fact that all of the seven large-scale sugarcane plantations were owned and operated by cane-sugar manufacturing companies.



Table 21. - Number of large-scale farms in study, distributed by principal source of income of owner, 1930

		Percentage of farms for which the principal source of income of owner was from -											
		Large- scale	Life	Live- stock	Lumber- ing	Invest- ment	Professional						
		farms	Strictly: Country: insurance	dealing; of	forest products; of	estate: salary, mer-	Miscel-						
		type of farming	in : farming: estate: ance	company: dealing	mining; stocks; busi-	chandizing; :laneous							
		study	or dis-	oil; dis-	bonds; ness	ing, etc.							
		tributing: tillery: banking:	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Geographic division:		Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
North Atlantic		100.0	64.4	0.8	-	3.4	-	10.2	1.7	14.4	5.1		
East North Central		100.0	66.4	0.9	0.9	1.8	-	10.6	0.9	15.9	2.6		
West North Central		100.0	83.4	0.8	-	0.8	-	7.1	-	7.1	0.8		
South Atlantic		100.0	59.7	1.3	-	-	1.9	13.2	1.3	20.1	2.5		
East South Central		100.0	74.5	-	0.7	-	0.7	7.2	0.6	13.0	3.3		
West South Central		100.0	72.1	-	-	-	4.3	4.8	-	16.8	2.0		
Mountain		100.0	85.0	-	-	-	1.8	4.7	1.9	4.7	1.9		
Pacific		100.0	84.7	-	-	-	0.8	4.5	2.3	5.3	2.3		
All States		100.0	73.3	0.5	0.2	0.6	1.4	7.7	1.0	12.8	2.5		
Type of farming:													
Truck		100.0	64.1	-	-	-	-	-	2.6	33.3	-		
Fruit		100.0	87.2	-	-	-	-	2.6	0.9	8.5	0.8		
Cotton		100.0	70.1	-	0.3	-	2.3	7.3	0.3	17.4	2.3		
Cash-grain		100.0	76.9	-	-	-	-	5.1	-	15.4	2.6		
Other crops		100.0	57.5	2.5	-	-	2.5	-	5.0	27.5	5.0		
General mixed		100.0	72.0	1.5	0.5	-	1.0	12.5	1.0	8.5	3.0		
Dairy		100.0	62.4	0.9	-	5.5	-	11.0	2.8	14.6	2.8		
Cattle and sheep ranches		100.0	89.5	-	-	-	3.2	4.1	-	2.4	0.8		
Poultry		100.0	90.0	-	-	-	-	-	-	-	10.0		
Other livestock		100.0	68.8	-	-	1.1	1.1	15.0	1.1	7.5	5.4		



Table 22. - Number of large-scale farms in study, with specified principal sources of income to owner, distributed by type of operation and type of ownership, 1930

		Percentage that number of farms of each type of operation or ownership was of all farms having principal source of income from -																		
Type of operation and type of ownership	Large-scale farms in study	Life insurance estate company	Live stock dealing milk	Lumbering forest products	Investment business of stocks, bonds, banking	Professional services, real estate, salary, merchandise, manufacturing, miscellaneous														
	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent				
Type of operation:																				
Hired labor, exclusively	41.4	41.7	80.0	-	100.0	31.2	43.0	36.4	34.9	50.0										
Tenants (Northern States' type)	3.0	2.9	-	-	-	-	4.7	18.2	2.1	-										
Hired labor and tenants (Northern States' type)	27.1	27.2	20.0	50.0	-	18.8	27.9	45.4	27.3	28.8										
Croppers or share hands	1.0	0.7	-	-	-	-	-	-	3.5	-										
Hired labor and croppers or share hands	11.3	10.4	-	-	-	25.0	16.3	-	13.3	14.3										
Tenants and croppers exclusively	1.0	1.2	-	-	-	-	-	-	0.7	-										
Mixed labor and tenants and croppers or share hands	15.2	15.9	-	50.0	-	25.0	8.1	-	18.2	7.1										
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0										
Type of ownership:																				
Corporation	25.4	19.2	20.0	100.0	71.4	31.2	12.8	54.5	24.5	25.1										
Partnership	17.7	25.9	-	-	28.6	6.3	10.5	-	18.2	7.1										
Individual	53.9	52.3	80.0	-	-	50.0	70.9	36.4	55.9	57.1										
Other	3.0	2.6	-	-	-	12.5	5.8	9.1	1.4	10.7										
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0										





The data presented in table 22 indicate that whereas 41.4 percent of all the large-scale farms studied were operated with hired labor exclusively, there were 100 percent of the milk-dealer or distributor type and 80 percent of the country estates that were so operated. Even in the case of farms that were owned by bankers, doctors, lawyers, dentists, etc., most of them were operated with hired labor exclusively. It will be noticed from the lower half of table 22 that a large number of the large-scale farms owned by life insurance companies, milk dealers, and real estate dealers were incorporated. However, most of the large-scale country estates, and most of the large-scale farms owned by bankers, doctors, lawyers, etc., were individually owned.

The 1,116 large-scale farms in this study were composed of 818 strictly farming propositions and 298 farms the owners of which received the major source of their incomes from some source other than farming. However, it was considered unfair to throw out the entire group of 298 farms on the basis of the supposition that they were not real farms because in the majority of instances this was not true. In 207 of the 298 cases it was concluded that the large-scale farms were real farms in every sense of the term. Hence, only 91 large-scale farms were finally excluded from some of the later tables in this report in which an effort was made to include only those large-scale farms which could rightfully be called real farms. In many instances the large-scale farms were simply units of larger organizations. In other instances the large-scale farms furnished only minor sources of income for their owners.

#### HOW FARMS WERE ACQUIRED

Most of the large-scale farms were acquired through normal purchases. In this respect they were similar to the medium and small farms as shown by the data presented in table 23. The principal differences between the methods of acquisition employed by the owners of the different-sized farms in securing the land which they now own were that the large-scale farms were more largely acquired through inheritance, considerably more through mortgage foreclosure, but very much less through homesteading.

Table 23. - Number of farms studied of designated size, distributed by method of acquisition, 1930

Size of farms	Percentage of farms acquired by -								
	All farms in study	Inheritance	Marriage	Mortgage foreclosure	Bargain or forced sale	Normal purchase	Home-steading		
	Number	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Small	619	100.0	12.6	2.6	1.8	2.3	77.7	3.0	
Medium	1,846	100.0	14.2	2.1	1.5	3.2	78.1	0.9	
Large-scale	1,116	100.0	15.5	1.7	4.2	3.1	75.3	0.2	



It is rather interesting to note the wide variations that occurred in some instances between different geographic divisions and between various types of farming in the methods by which the large-scale farms were acquired. As indicated in table 24, the South Atlantic States were the ones in which inheritance, as a method of acquisition, was the most important. Inheritance apparently was of least importance in the Mountain States. In the latter region approximately 4 percent of the owned area in all the farms was acquired through inheritance whereas in the former region a little over 27 percent of the owned farm land was so acquired. This may have been due partially to the difference in the age of the agriculture in these two geographic divisions.

Table 24. - Number of large-scale farms in study, distributed by method of acquisition, 1930

Geographic division and type of farming	:	Large-scale farms in study	:Percentage of large-scale farms acquired by -						
			Inheri-	Mar-	Mort-	Bargain:	Normal:	Home-	
			tance	riage	gage	fore-	forced	pur-	stead
			:	:	:	closure:	sale	chase:	
			Number:	Percent:	Percent:	Percent:	Percent:	Percent:	Percent:
Geographic division:	:	:	:	:	:	:	:	:	:
N. Atlantic	:	118:	100.0	: 13.4	: 0.3	: 0.1	: 1.2	: 85.0	: -
E. N. Central	:	113:	100.0	: 16.2	: 4.0	: 6.6	: 3.9	: 69.3	: -
W. N. Central	:	127:	100.0	: 13.9	: -	: 6.2	: 2.5	: 77.3	: 0.1
S. Atlantic	:	159:	100.0	: 27.4	: 3.0	: 3.9	: 7.1	: 58.6	: -
E. S. Central	:	153:	100.0	: 17.7	: 1.2	: 3.4	: 3.5	: 74.2	: -
W. S. Central	:	208:	100.0	: 15.9	: 3.0	: 5.6	: 1.4	: 73.8	: 0.3
Mountain	:	107:	100.0	: 3.8	: 0.8	: 7.1	: 2.8	: 84.8	: 0.7
Pacific	:	131:	100.0	: 10.3	: 0.3	: 0.9	: 2.2	: 85.9	: 0.4
All States	:	1,116:	100.0	: 15.5	: 1.7	: 4.2	: 3.1	: 75.3	: 0.2
Type of farming:	:	:	:	:	:	:	:	:	:
Truck	:	39:	100.0	: 4.6	: 3.2	: -	: 3.1	: 89.1	: -
Fruit	:	117:	100.0	: 10.0	: 0.4	: 0.8	: 4.3	: 84.5	: -
Cotton	:	345:	100.0	: 19.0	: 2.6	: 4.1	: 3.8	: 70.3	: 0.2
Cash-grain	:	39:	100.0	: 11.1	: 0.6	: 9.5	: 3.0	: 75.6	: 0.2
Other crops	:	40:	100.0	: 4.0	: -	: 11.2	: 7.0	: 77.8	: -
General mixed	:	200:	100.0	: 21.0	: 2.5	: 5.9	: 2.3	: 68.0	: 0.3
Dairy	:	109:	100.0	: 13.2	: 2.0	: 2.6	: 1.5	: 80.7	: -
Cattle and sheep	:	:	:	:	:	:	:	:	:
ranches	:	124:	100.0	: 6.6	: 0.1	: 5.8	: 2.7	: 84.5	: 0.3
Poultry	:	102:	100.0	: 22.7	: -	: -	: 1.2	: 76.1	: -
Other livestock	:	93:	100.0	: 22.2	: 0.7	: 2.2	: 1.8	: 72.8	: 0.3

The acquisition of large-scale farms as a result of mortgage foreclosure seemed to have been most prevalent in the North Central and Mountain Divisions. The acquisition of large-scale farms through bargain counter or forced sales was most prevalent in the South Atlantic States.

When the various methods of acquisition of large-scale farms were classified by types of farming, as shown in table 24, it was discovered that inheritance played an important role in the cotton and in the general mixed, or diversified types of farming, and in the poultry and "other livestock" types. The



"other livestock" type was influenced mostly in the present case by the beef-cattle and sheep feeders, beef cattle and hogs, and general livestock types of farming.

Acquisition by mortgage foreclosure seemed to be most important in the cash-grain and "other crops" types of farming. More specifically, the particular types of farming here involved were the rice farms and the sugarcane plantations.

It might be pointed out that as high as 89 percent of the farm area owned by large-scale truck farms was acquired through normal purchase. Fruit farms and livestock ranches were next highest in importance.

The question may be asked as to whether the methods of acquisition employed by the large-scale corporations were any different from those used by partnerships or individuals in securing the farm land which they now own. As indicated in table 25, the corporations secured their farms more largely through normal purchases than did any of the other ownership types. Acquisition as a result of mortgage foreclosure, although relatively not very important in any of the ownership types, still was more important in the corporately owned large-scale farms than in the partnerships or the individually owned farms. Inheritance, as a form of acquisition, was of least importance in the case of corporation farms.

Table 25. - Number of large-scale farms studied of designated types of ownership, distributed by method of acquisition, 1930

Type of ownership	Percentage of large-scale farms acquired by -							
	Large-scale farms in study	Inheritance	Mortgage foreclosure	Bargain or forced sale	Normal purchase	Home-stead		
	Number	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Corporation	284	100.0	4.4	-	8.2	3.7	83.6	0.1
Partnership	197	100.0	22.8	2.2	4.0	3.8	66.9	0.3
Individual	601	100.0	17.9	2.4	2.5	3.7	73.4	0.1
Other <sup>1/</sup>	34	100.0	29.3	0.7	4.6	0.4	65.0	-
Total or average	1,116	100.0	15.5	1.7	4.2	3.1	75.3	0.2

<sup>1/</sup> Includes estate ownership, trust ownership, and combinations of corporation and partnership, corporation and individual, and partnership and individual ownerships.

The above discussion emphasizes the fact that, for the most part, large-scale farms were acquired through normal purchases and hence probably were largely the result of special planning for large-scale farm production and therefore not the result of large-scale organizations taking advantage of extremely unfortunate circumstances of the former owners. This idea will be strengthened further under the discussion devoted to the length of time the present large-scale farms have been in operation.





## YEARS OF OPERATION UNDER CURRENT PLAN

From the data secured it would appear that the large-scale farms had been operating, under the system described at the time of the study, for a greater number of years, on the average, than either the medium or the small farms. However, as indicated by the data presented in table 26, this difference in years of operation between different-sized farms really did not become significant until a consideration was made of some of the important variations which became apparent when the data were classified by geographic divisions, by types of farming, and by types of ownership.

Table 26. - Average number of years that farms studied had been operated under the systems prevailing at time of study, by size, 1930

Geographic division, type of farming, and type of ownership	Average number of years in operation <sup>1/</sup>		
	Small	Medium	Large-scale
	farms	farms	farms
	Years	Years	Years
Geographic division:	:	:	:
North Atlantic	: 19.5	: 14.9	: 16.8
East North Central	: 17.2	: 15.6	: 17.9
West North Central	: 11.3	: 14.9	: 19.7
South Atlantic	: 16.3	: 17.6	: 15.9
East South Central	: 17.2	: 16.1	: 13.9
West South Central	: 11.8	: 12.8	: 14.5
Mountain	: 10.3	: 11.1	: 16.0
Pacific	: 13.8	: 12.8	: 17.7
All States	: 13.4	: 13.9	: 15.7
Type of farming:	:	:	:
Truck	: 14.0	: 12.9	: 11.6
Fruit	: 15.3	: 12.0	: 17.4
Cotton	: 12.8	: 14.6	: 13.2
Cash-grain	: 5.1	: 11.4	: 15.6
Other crops	: 13.9	: 11.2	: 12.6
General mixed	: 11.5	: 15.1	: 15.9
Dairy	: 16.2	: 12.8	: 9.5
Cattle and sheep ranches	: 17.0	: 15.8	: 19.5
Poultry	: 16.2	: 10.8	: 19.7
Other livestock	: 14.8	: 14.3	: 16.1
Type of ownership:	:	:	:
Corporation	: 10.5	: 10.8	: 14.9
Partnership	: 11.8	: 11.3	: 15.5
Individual	: 14.2	: 16.0	: 17.0
Other <sup>2/</sup>	: 5.0	: 23.2	: 16.8

<sup>1/</sup> Refers to the average number of years that the farms had been operated under the system of management and operation then current on each individual farm in 1930.

<sup>2/</sup> See footnote table 9.



### By Geographic Divisions

In the North Atlantic Division the small farms had been operated according to the current plan longer than the farms in either of the other two size groups. The East South Central Division afforded another instance in which the small farms had followed the current system of operation longer than had either the medium or the large-scale farms.

The geographic divisions in which the large-scale farms had been following the current plan of operation for a considerably longer time on the average than either the medium or small farms were the West North Central, Mountain, and Pacific Divisions.

### By Types of Farming

Judging from the data presented in the middle portion of table 26 it would appear that large-scale farming in the United States had been more firmly established and at an earlier date in the case of beef-cattle and sheep ranches, poultry farms, and fruit farms than in any of the other types of farming. On the other hand it appears that the large-scale dairy farms and the large-scale truck farms are of more recent origin.

Another interesting feature of the data in table 26 is the fact that the small cash-grain farms are of much more recent origin than the medium or the large-scale cash-grain farms. If one were to have heeded much of the discussion which has taken place on this point in the past, one would have had the impression that the large-scale cash-grain farms were of more recent origin than were the medium or the small-sized cash-grain farms. However, the present data, based upon 35 small, 151 medium, and 39 large-scale farms, point the other way.

### By Types of Ownership

Generally speaking, it may be stated that the corporation farms, regardless of size, were of slightly more recent origin than the partnerships or the individually owned farms.

In view of the fact that the large-scale farms had been in operation for a longer period of time than the small or medium farms, it may be well to emphasize again the fact that the large-scale farms in existence in 1930 were, for the most part, the result of conscious planning for large-scale production.

### POLICY OF OWNERSHIP AND OPERATION

By far the greater number, in fact 77 percent, of the large-scale farms studied were owned and operated under a policy of holding and operating for profit - not intending to sell in the near future. Only 18 percent of the large farms studied were being held and operated temporarily until such time as a satisfactory sale could be made. The above figures are to be found at the base of table 27. As indicated in this table, there was a considerable amount of variation between geographic divisions, between types of farming, and between types of ownership in the policy of operation followed. Also there were significant differences between small, medium, and large-scale farms in this respect.



Table 27. - Distribution of number of small, medium, and large-scale farms studied, by policy of ownership and operation, 1930

Division, type of farming, and type of ownership	Percentage of farms on which policy of ownership and operation was -											
	To hold only				To hold and operate--To sell part, and :				until a satisfactory sale can be made			
	: not to sell in future				: also to hold and operate part for profit				: No answer given			
	Small	Medium	Large	Per- cent	Small	Medium	Large	Per- cent	Small	Medium	Large	Per- cent
Geographic division:	Per- cent	Per- cent	Per- cent	Per- cent	Per- cent	Per- cent	Per- cent	Per- cent	Per- cent	Per- cent	Per- cent	Per- cent
North Atlantic	16	11	10	81	88	87	3	-	2	-	1	1
East North Central	19	13	13	74	82	82	3	3	5	4	2	-
West North Central	14	10	13	74	85	81	1	4	4	11	1	2
South Atlantic	27	13	20	72	84	73	-	2	6	1	1	1
East South Central	25	17	20	73	82	77	-	1	3	2	-	-
West South Central	12	17	21	86	80	73	-	2	4	2	1	2
Mountain	14	19	24	73	77	66	3	3	7	10	1	3
Pacific	21	14	19	70	81	77	-	3	4	9	2	-
All States	17	13	18	76	83	77	1	3	4	6	1	1
Type of farming:	Per- cent	Per- cent	Per- cent	Per- cent	Per- cent	Per- cent	Per- cent	Per- cent	Per- cent	Per- cent	Per- cent	Per- cent
Truck	12	5	10	71	86	77	-	-	3	17	9	10
Fruit	14	5	5	80	92	89	6	3	5	-	-	1
Cotton	24	21	23	75	77	72	-	1	4	1	1	1
Cash-grain	26	14	15	43	82	82	3	2	3	28	2	-
Other crops	23	22	28	70	72	72	-	2	-	7	4	-
General mixed	16	10	13	73	86	76	1	3	6	5	1	-
Dairy	16	15	12	79	82	84	2	2	4	3	1	-
Cattle and sheep ranches	14	21	21	86	79	73	-	-	4	-	-	2
Poultry	-	9	-	83	82	100	17	9	-	-	-	-
Other livestock	15	13	23	84	82	72	-	4	5	3	1	-
Type of ownership:	Per- cent	Per- cent	Per- cent	Per- cent	Per- cent	Per- cent	Per- cent	Per- cent	Per- cent	Per- cent	Per- cent	Per- cent
Corporation	18	17	21	73	76	74	-	2	3	9	5	2
Partnership	17	10	15	79	83	79	-	-	1	5	4	1
Individual	18	14	17	75	82	78	2	3	5	5	1	1
Other 1/	-	22	18	100	70	73	-	8	9	-	-	-

1/ See footnote table 9.



## By Geographic Divisions

The policy of owning and operating a farm only until a satisfactory sale can be made is often classed as "liquidation management," especially so if the farm was acquired as the result of a mortgage foreclosure. The group of States in which this policy of ownership and operation was most prevalent in the case of the large-scale farms studied was the Mountain Division. Since it was also in the Mountain Division (table 24) that mortgage foreclosure was more important than in any other division, we can say that liquidation management of large-scale farms was most prevalent in the Mountain States. The least amount of this type of ownership and operation was found in the North Atlantic States. In these States 87 percent of the large-scale farms studied were being held and operated for profit with no thought of selling in the near future. We shall see later on what influence financial success had upon these policies.

In every geographic division the percentages of medium-sized farms that were being operated under a more or less permanent policy were higher than for the large-scale farms. In the one exception to this statement the figure was identical. The reverse of the above situation was also true; namely, that in most instances a higher percentage of the large-scale farms was being operated under liquidation conditions than was true of the medium farms. As indicated in table 27, the figures for the small farms resemble those for the large-scale farms more than they do the medium farms. A larger percentage of the small farms did not answer this question than was true of the medium and large farms.

## By Types of Farming

As indicated by the data appearing in the central portion of table 27, 100 percent of the large-scale poultry farms, 89 percent of the large-scale fruit farms, 84 percent of the large-scale dairy farms, and 82 percent of the large-scale cash-grain farms were being operated under a permanent policy, that is, holding and operating for profit with no intention of selling in the near future. On the other hand, as seen in table 27, there were rather sizeable percentages of the large-scale "other crops" farms, cotton plantations, and livestock ranches which were being operated on a temporary or liquidation basis, the plan being to sell just as soon as a satisfactory deal could be made. Fifty-seven percent of the large-scale sugarcane plantations were being operated on such a plan. These appear in table 27 combined with several other types under "other crops."

## By Types of Ownership

Large-scale farms owned by corporations were operated to a slightly higher extent according to a liquidation policy and to a slightly lower extent according to a "permanent" policy than were these large-scale farms owned by partnerships and by individuals. This is shown in the lower portion of table 27. Large-scale farms owned by partnerships seem to have been owned and operated more nearly from a permanent standpoint and less from a liquidation standpoint than the corporations or the individually owned farms.

One of the important points brought out in table 27 is the fact that as a general rule the medium-sized farms stood out against the small and against the large-scale farms as being owned and operated more nearly according to a permanent policy and less according to a liquidation policy than either of the other two size groups.







### By Major Source of Income of Owner

As indicated previously the owners of most of the large-scale farms received the major portions of their incomes from farming. A very few large-scale farms were really country estates. Others were owned by life insurance companies, bankers, etc. An analysis of the large-scale farming data brought out the fact that whereas 77 percent of all the large-scale farms were operated according to a "permanent" policy, slightly more than 81 percent of the farms belonging to the "strictly farming" class were so operated. The country estates were, of course, operated 100 percent on such a basis. The large-scale farms owned by livestock dealers and milk distributors were operated approximately 86 percent on a permanent policy.

On the contrary, as might have been partially expected, the large-scale farms in the hands of life insurance companies were being operated 100 percent on a policy of selling the holdings just as soon as satisfactory prices could be obtained. This liquidation policy of ownership and operation was followed also on 64 percent of the large-scale farms owned by real estate dealers.

### FARM INCOME VERSUS FARM EXPENSE

Estimates of the relative magnitudes of farm incomes compared with farm expenses were obtained by asking the following question: "Ordinarily, is the income from this farm or farming company sufficient to pay all farm expenses?" The farms included in this portion of the analysis, and in most of the discussions to follow, were real farms; that is, - all of the country estates of rich men were excluded as well as some of the farms owned by real estate dealers, bankers, manufacturers, and professional men. In fact, in every case where it looked as if the farm were not being operated principally as a real farming proposition, that farm was left out of the analysis. 8/

On the whole it can be said that a larger proportion of the medium-sized farms were successful than either the small or the large-scale farms. As indicated by the data presented in table 28, a larger proportion of the medium-sized farms had incomes large enough to cover farm expenses than did the small farms or the large farms. The figures were as follows: Medium, 83 percent; small, 80 percent; large-scale, 77 percent. The striking thing about these figures is that they are so much alike. This relationship, however, is only an average relationship for the United States. There was considerable variation from this average result when the data were classified according to geographic divisions, types of farming, and types of ownership.

### By Geographic Divisions

In the North Atlantic States the small farms exceeded the medium and the large-scale farms in the percentage of their number which had farm incomes sufficient to pay all farm expenses. This was also true, as shown in table 28, of the small farms in the West South Central Division.

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8/ This resulted in the exclusion of 55 small, 142 medium, and 91 large-scale farms.



Table 28.- Percentage of total number of real farms studied, on which the farm income was sufficient to cover all farm expenses, 1930 <sup>1/</sup>

Geographic division, type of farming, and type of ownership	All real farms in study <sup>1/</sup>			Percentage of total number of farms on which the farm income was sufficient to cover all farm expenses		
	Small	Medium	Large	Small	Medium	Large
	Number	Number	Number	Percent	Percent	Percent
Geographic division:	:	:	:	:	:	:
North Atlantic	102	211	107	85	82	69
East North Central	83	334	101	74	79	64
West North Central	125	422	120	85	86	82
South Atlantic	55	144	139	73	75	66
East South Central	39	104	133	72	82	77
West South Central	49	145	193	84	83	81
Mountain	72	193	106	82	86	84
Pacific	39	151	126	82	85	87
All States	564	1,704	1,025	80	83	77
Type of farming:	:	:	:	:	:	:
Truck	16	21	39	88	81	77
Fruit	32	103	115	78	88	86
Cotton	63	146	305	76	77	74
Cash-grain	31	121	36	90	84	86
Other crops	45	60	36	76	78	72
General mixed	155	568	180	79	84	80
Dairy	149	309	102	83	79	59
Cattle and sheep ranches	7	91	123	86	86	89
Poultry	6	11	9	100	82	89
Other livestock	60	274	80	78	85	69
Type of ownership:	:	:	:	:	:	:
Corporation	7	84	266	71	71	74
Partnership	58	338	187	84	85	84
Individual	495	1,260	543	80	83	76
Other	4	22	29	50	77	76

<sup>1/</sup> All country estates, and some of the farms owned by real estate dealers, bankers, manufacturers, and professional men were excluded. See text, page 44.



In the Pacific Division a larger proportion of the large-scale farms seemed to have been successful than in the case of the small or the medium farms. In the remaining five geographic divisions, however, the medium-sized farms seemed to have been the ones in which a larger proportion were successful.

#### By Types of Farming

Here is where significant differences begin to show up. As shown by the data included in table 28 it would appear that farm income on the small truck farms was more often sufficient to offset farm expenses than on either the medium or the large-scale truck farms. Likewise, this was also true of the small cash-grain, dairy, and poultry farms. In other words, insofar as farm income and actual farm expenses were concerned, a larger proportion of the small farms of the truck, cash-grain, dairy, and poultry types were successful than in the case of either the medium or large farms. On the other hand, the medium-sized fruit, cotton, other livestock, and general mixed types of farming seemed to be the types of farming in which financial success was more often reported. From the standpoint of farm income versus farm expense a larger proportion of the large-scale beef-cattle and sheep ranches seemed to have been successful than was true of either the small or the medium-sized ranches.

#### By Types of Ownership

When farm income was compared with farm expenses by types of ownership it developed, as is indicated in the lower portion of table 28, that the large-scale corporation farms were more often able to make farm income equal farm expenses than were the small and the medium corporation farms. However, when it came to individually owned farms it appeared that a larger proportion of the medium-sized farms were successful than in the case of either the large or the small farms. Apparently the individually owned farms, regardless of size, were more often able to make farm income cover farm expenses than were the corporation farms.

#### FINANCIAL SUCCESS

This is perhaps the most interesting phase of the study. It was believed possible, without going to the expense of conducting an expensive detailed study of financial records, to secure an accurate picture of the relative success of small, medium, and large-scale farms and the relative success of one type of large-scale farm with another simply by asking the following question: "In your judgment, has your farm or company been a financial success?" The answers to this question were given in such a way as to encourage definite reliance upon their accuracy.

The question of financial success is not synonymous with the question of whether or not farm income meets farm expenses. Especially from the layman's viewpoint is this true. As indicated by the answers to these questions, which have been summarized in tables 28 and 29, a farm may be able to pay farm expenses but not be able to return a sufficient profit for its owner, or owners, to consider the farm a financial success.

The summarized results as to the financial success of farms of different sizes, as shown in table 29, indicate that on the average a larger proportion of the medium-sized farms were successful than was true of either the small or the large-scale farms. The small and the large-scale farms were each 60 percent successful compared with a figure of 65 percent for the medium-sized farms. As will be pointed out shortly, however, this relationship did not always hold when individual types of farming were considered.



Table 29. - Distribution of number of small, medium, and large-scale farms studied, by whether or not the farm was a financial success, 1930 <sup>1/</sup>

Geographic division, type of farming, and type of ownership	Percentage of farms on which owners replied -								
	Yes -			No -			Other <sup>2/</sup>		
	A financial success			Not a financial success					
	Small	Medium	Large	Small	Medium	Large	Small	Medium	Large
	Per- cent	Per- cent	Per- cent	Per- cent	Per- cent	Per- cent	Per- cent	Per- cent	Per- cent
Geographic division:	:	:	:	:	:	:	:	:	:
N. Atlantic	68	69	61	21	21	34	11	10	5
E. N. Central	53	59	50	37	28	38	10	13	12
W. N. Central	59	68	66	25	18	22	16	14	12
S. Atlantic	46	56	48	44	31	32	10	13	20
E.S. Central	64	59	55	20	26	33	16	15	12
W. S. Central	65	59	63	22	29	26	13	12	11
Mountain	60	73	68	21	17	24	19	10	8
Pacific	64	71	72	13	18	21	23	11	7
All States	60	65	60	26	23	28	14	12	12
Type of farming:	:	:	:	:	:	:	:	:	:
Truck	81	71	72	6	19	20	13	10	8
Fruit	66	80	72	22	14	18	12	6	10
Cotton	49	53	54	36	34	32	15	13	14
Cash-grain	61	69	75	29	13	14	10	18	11
Other crops	62	53	56	20	33	30	18	14	14
General mixed	60	64	58	27	21	32	13	15	10
Dairy	59	61	49	26	29	43	15	10	8
Cattle and sheep ranches	57	76	74	29	19	17	14	5	9
Poultry	100	73	89	-	18	11	-	9	-
Other livestock	57	67	52	23	22	35	20	11	13
Type of ownership:	:	:	:	:	:	:	:	:	:
Corporation	71	57	60	29	38	32	-	5	8
Partnership	62	66	64	21	21	24	17	13	12
Individual	59	65	60	27	22	28	14	13	12
Other	75	59	59	-	32	24	25	9	17

<sup>1/</sup> See footnote table 28.

<sup>2/</sup> In this column several other answers have been combined, such as - "Almost;" "Yes, up until last year;" "Yes, up until 2 to 4 years ago;" etc.





## By Geographic Divisions

Beginning with the North Atlantic States and extending through the East North Central, West North Central, and South Atlantic, the medium-sized farms seem to have been the ones in which a larger proportion were successful, whereas in the East South Central and West South Central a larger proportion of the small farms were reported as being successful than were reported for either the medium or the large-scale farms. In the Mountain States the medium-sized farms were the ones which seemed to be most often successful, and in the Pacific States it appears that the large-scale farms were more often a financial success than was true of either the medium or the small farms.

## By Types of Farming

Perhaps the most striking thing here is the relatively outstanding success of the large-scale cash-grain farms as compared with the outstanding lack of success of the large-scale dairy farms. This is shown by the data included in the middle portion of table 29. Three-fourths of the large-scale cash-grain farms had made a financial success whereas a little less than one-half of the large dairy farms had made a financial success. The former represents one of the most extensive types of agriculture that we have, and the latter represents one of the intensive types.

Of all the truck farms studied, the small-sized truck farms were more often successful than in the case of either the medium or the large truck farms. This was also true of the poultry farms. Here again we have in the truck and the poultry businesses two additional types of farming which are extremely intensive.

There did not seem to be a great deal of difference in the proportion of the small, medium, and large-scale cotton farms that reported success, although the medium and large-scale farms seemed to have the advantage over the small farms.

Another important point brought out by this study was the fact that in the general mixed type of farming it was the medium-sized farm and not the small nor the large-scale farm that was most frequently a financial success. This suggests that if one wishes to produce a variety of crop and livestock products all on the same diversified farm he should have enough of each enterprise to make each worthwhile, but after a certain point in the size of each enterprise is reached it is better to split off some of these enterprises and conduct them by themselves in a specialized way on separate farms.

As might have been expected, the medium and large-scale beef-cattle and sheep ranches were more often successful than were the smaller ones. Here again we have a relatively extensive type of agriculture which seems to lend itself to larger operations.

Considering all of the various types of large-scale farms studied and judging from the relative frequency of financial success of each, it would appear that the types which lend themselves most readily to large-scale operations would be the cash-grain, beef-cattle and sheep ranches, and poultry farms, whereas the types least adapted to large-scale operations would be the dairy and truck farms since the latter represent intensive types of agriculture



and require large amounts of supervision. It would appear also from an analysis of these data that the general mixed type of farming, together with fruit farms, lend themselves to medium-sized operations and that the fruit farms are somewhat adapted to large-scale production.

#### By Types of Ownership

This study would seem to indicate that the small-sized corporation farm was more often successful than either the medium or the large-scale corporation farm. On the other hand the medium-sized individually owned farm seems to have been more often successful than the small or the large farms individually owned. Another very important conclusion that can be reached from this study is the fact that the corporately-owned farms stood no better chances of making a financial success than the individually owned farms. Each type of ownership was associated with farms which were 60 percent financially successful.

#### SUMMARY - FINANCIAL SUCCESS

By way of summary, based upon the analysis of this study which included small, medium, and large-scale farms taken at random throughout the United States, it cannot be said that large-scale farms in general have been any more successful from a financial point of view than the small farms, or vice versa. It can, however, be said that, judging from the evidence here presented, the medium-sized farms in general seem to have been more often successful financially than either the small or the large-scale farms.

Furthermore, if large-scale farming is to be contrasted critically with medium and small-sized farms it must be done upon a type-of-farming basis which has been attempted in this study.



UNITED STATES DEPARTMENT OF AGRICULTURE  
Bureau of Agricultural Economics  
Washington, D. C.

LARGE-SCALE FARMING (Confidential)

Name of farm or company \_\_\_\_\_

Home office address \_\_\_\_\_ County \_\_\_\_\_ State \_\_\_\_\_

Name of operator or manager \_\_\_\_\_

Name of owner \_\_\_\_\_ Address \_\_\_\_\_

1. Is your business a corporation, a partnership, or individually owned? \_\_\_\_\_
2. Total acres owner by you or your company \_\_\_\_\_
3. Acres rented from others; dash \_\_\_\_\_; share \_\_\_\_\_; total \_\_\_\_\_
4. Acres managed for others \_\_\_\_\_
5. Total (lines 2 to 4, inclusive) \_\_\_\_\_
6. Acres rented out to tenants, croppers, and others, regardless of the form of the lease or agreement \_\_\_\_\_
7. Total acres under your direct operation (5 minus 6) \_\_\_\_\_
8. Acres rented to tenants or croppers under a lease agreement whereby you or your company maintains definite control and supervision over them \_\_\_\_\_
9. Total acres under your direct operation plus total acres rented to tenants or croppers under close supervision (7 plus 8) \_\_\_\_\_
10. How many acres of the total land shown in answer to question 9 were crop land in 1929 - that is, all acres harvested (if double-cropped, count once), crop failures, idle or fallow land, and rotation pasture? \_\_\_\_\_
11. (a) Of the total acres owned, how many were acquired by inheritance? \_\_\_\_\_; marriage, \_\_\_\_\_; mortgage foreclosure, \_\_\_\_\_; bargain counter or forced sale, \_\_\_\_\_; normal sale, \_\_\_\_\_ (Total should equal answer to question 2.)
- (b) Is the present ownership and operation based principally upon a policy of operating only until a satisfactory sale can be made? \_\_\_\_\_; or primarily with the idea of holding and operating for profit, not intending to sell in the near future? \_\_\_\_\_



Note. - All of the questions in the remainder of this schedule apply to the acreage given in answer to question No. 9.

12. (a) Into how many separate tracts of land is the property you are operating divided? \_\_\_\_\_
- (b) From the standpoint of operation, into how many separate farming units is your property divided? \_\_\_\_\_
- (c) How far apart are the two most widely separated units? \_\_\_\_\_
- (d) How many years has this farm or farming organization been operated under the present plan of operation and management? \_\_\_\_\_
13. (a) How many farm managers are used? \_\_\_\_\_
- (b) How many foremen or supervisors? \_\_\_\_\_
- (c) Approximately how many share or wage hands (not counting managers, foremen, and supervisors) are used to operate all the acres referred to in question No. 9 during January, \_\_\_\_\_; February, \_\_\_\_\_; April, \_\_\_\_\_; May, \_\_\_\_\_; June, \_\_\_\_\_; July, \_\_\_\_\_; August, \_\_\_\_\_; September, \_\_\_\_\_; October, \_\_\_\_\_; November, \_\_\_\_\_; December, \_\_\_\_\_
- (d) If any of your properties are operated with tenants, croppers, or share hands, kindly fill in the approximate number of acres handled according to each of the following systems:

Kind of Tenant	Acres
Cash rent _____	_____
One-third share _____	_____
Two-fifths share _____	_____
One-half share (tenant furnishes work stock and equipment) _____	_____
One-half share (tenant furnishes labor only) _____	_____
Two-thirds share _____	_____
Fifty-fifty livestock share _____	_____
Other _____	_____

14. Capitalization of Farm Business. - What is the present combined value of -
- (a) Land, buildings, livestock, feeds, and supplies? \_\_\_\_\_ \$ \_\_\_\_\_
- (b) All farm machinery, equipment, and tools (including farm autos) \_\_\_\_\_





15. Kindly supply the appropriate information in the following table:

Make of Tractor	Number of Tractors	Size	Average age

16. Number of head of livestock, January 1, 1930: Horses and mules (work animals), \_\_\_\_\_; other than work animals, \_\_\_\_\_; dairy cattle 2 years and over, \_\_\_\_\_; dairy cattle under 2 years of age, \_\_\_\_\_; beef cattle (breeding herd) 2 years and over, \_\_\_\_\_; beef cattle (breeding herd) under 2 years, \_\_\_\_\_; steers, \_\_\_\_\_; mature hogs, \_\_\_\_\_; shoats, \_\_\_\_\_; mature sheep, \_\_\_\_\_; lambs, \_\_\_\_\_; poultry (mature fowls), \_\_\_\_\_; other livestock, \_\_\_\_\_

How many head of the following classes of livestock do you feed out during the year? Steers and heifers, \_\_\_\_\_; hogs, \_\_\_\_\_; lambs, \_\_\_\_\_; poultry, \_\_\_\_\_ other, \_\_\_\_\_

17. Name the principal sources of farm income in the order of their importance -  
 (a) \_\_\_\_\_ (b) \_\_\_\_\_ (c) \_\_\_\_\_  
 (d) \_\_\_\_\_ (e) \_\_\_\_\_ (f) \_\_\_\_\_

18. Is your total income derived chiefly from your farming operations? \_\_\_\_\_  
 If not, please state the other source or sources \_\_\_\_\_

19. Ordinarily, is the income from this farm or farming company sufficient to pay all farm expenses? \_\_\_\_\_; or, is it necessary to employ additional funds from outside sources in order to operate under the present system? \_\_\_\_\_

20. General Remarks. - In your judgment, has your farm or company been a financial success? \_\_\_\_\_ What is your opinion with reference to the future possibilities of large-scale farming in your locality? State briefly your reasons. \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

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